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THE
Surgical Instruments of the Hindus

THE
**SURGICAL INSTRUMENTS
OF THE HINDUS**

WITH

**A Comparative Study of the Surgical Instruments of
the Greek, Roman, Arab and the Modern
European Surgeons**

BY

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Lecturer on Surgery, Calcutta Medical School and College of Physicians
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Life Member and Professor of Botany, Indian Association
for the Cultivation of Science, Examiner,
Calcutta University*

Griffith Prize Essay for 1909

In Two Volumes

Vol. II

396 Illustrations in 82 Plates

**Published by the Calcutta University
1914**

**PRINTED BY ATULCHANDRA BHATTACHARYYA
AT THE
CALCUTTA UNIVERSITY PRESS
*Senate House, Calcutta***

PREFACE

Much trouble has been taken with our illustrations, but the author is fully conscious of their many defects. I am greatly indebted to several authors mentioned in the legends to the plates as the readers will find certain of their illustrations copied in this volume. It was found necessary in a comparative study of the surgical instruments used by the different nations of the world. It has been my wish to render due credit to all persons for the illustrations by which they may severally have contributed to the advancement of our knowledge of the subject, and I have never assumed to myself drawings, which belong to others. For those illustrations, not otherwise acknowledged, the author is solely responsible.

For his skill and patience in drawing and printing these figures I am glad to take this opportunity of thanking Mr. K. V. Seyne.

The author deems it a pleasant duty to express his thanks to the University of Calcutta for the liberality displayed in the matter of illustrations.

80, RUSSA ROAD NORTH,
Calcutta, February, 1914. } G. N. MUKHOPĀDHYĀYA.

ABBREVIATIONS

Adams :	The Genuine Works of Hippocrates. Translated by Francis Adams, LL.D. in two volumes. (Sydenham Society)
A. H.	Catalogue of Surgical Instruments and Apphances Allen and Hanburys Ltd. 1903.
A. S.	Catalogue of Surgical Instruments and Apphances Arnold and Sons 1895.
Anderson	See Wellcome
B. B.	Surgical Instruments and Apphances. Burgoyne, Burbidges & Co
C. C. G.	Collection de Chirurgiens Grecs. Bibliotheque Nationale Paris.
Erichsen	The Science and Art of Surgery. By Sir John Eric Erichsen Bt., F R S, LL.D. Tenth Edition. 1895
Esmarch	The Surgeon's Handbook of the Treatment of Wounded in War. By Dr. Friedrich Esmarch
Heath.	Minor Surgery and Bandaging. By C. Heath, F R.C S. Second Edition.
I. M. G..	Indian Medical Gazette, 1904.
K. S..	Catalogue of Surgical Instruments. Kny-Scheerer & Co
Milne.	Surgical Intruments in Greek and Roman Times. By T S. Milne, M.A., M.D., 1907.
Porter.	The Surgeon's Pocket-Book The Best Treatment of Wounded in War. By Surgeon-Major T. H. Porter. 1891.
Princep :	Princep's (Thomas') Indian Antiquities.

- Swain . Surgical Emergencies. By W. P. Swain,
 F.R.C.S. Third Edition. 1880.
- Thakore Saheb : History of Aryan Medical Science. By H. H
 Sir Bhagvat Singh Jee., K.C.I.E., M.D.,
 D.C.L., LL.D., F.R.C.P.E. Thakore Saheb
 of Gondal. 1896.
- Waggett . Diseases of the Nose. By E. B. Waggett,
 M.A., M.B., B.C. 1907.
- Wellcome . Third Report of the Wellcome Research
 Laboratories at the Gordon Memorial College,
 Khartoum.
- White . The Veterinary Art. By James White. 1851.
-

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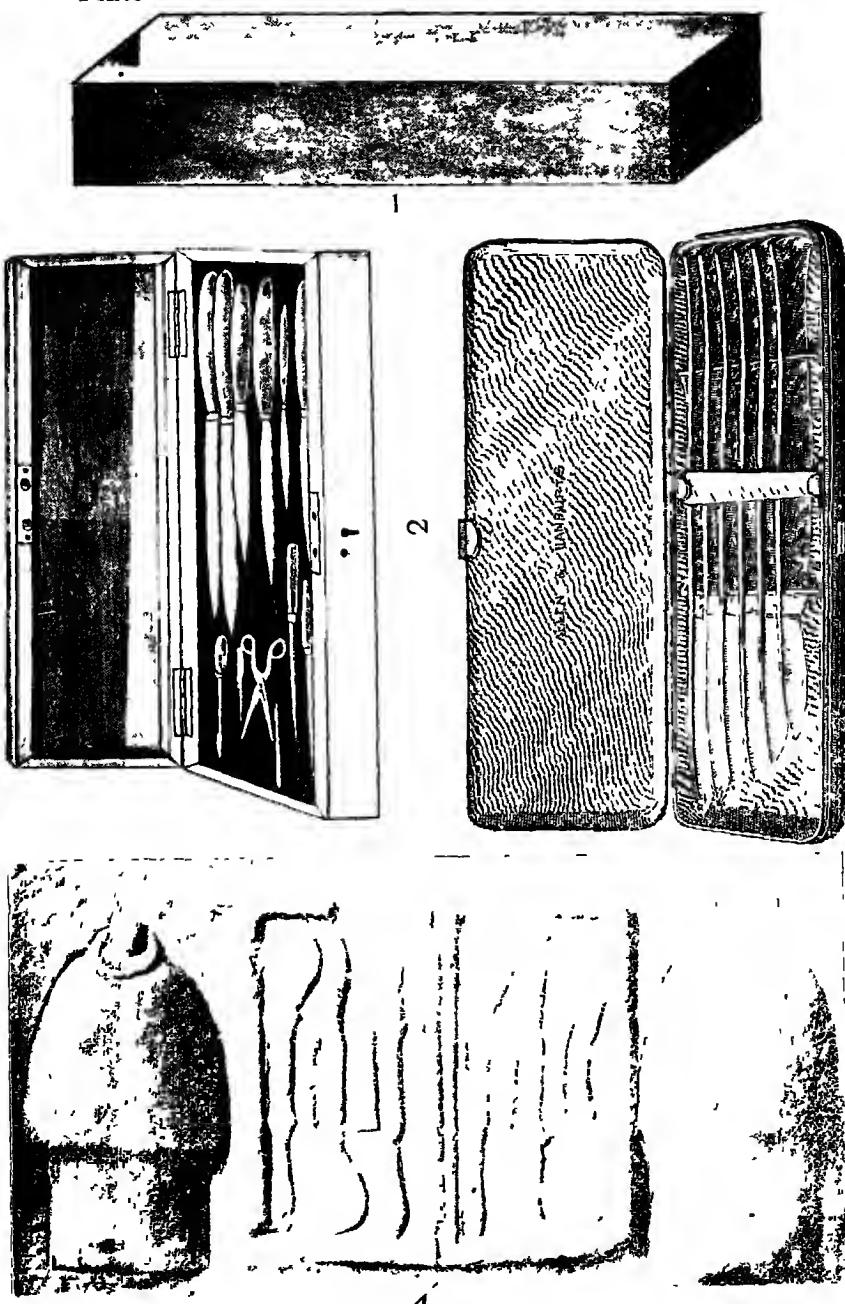
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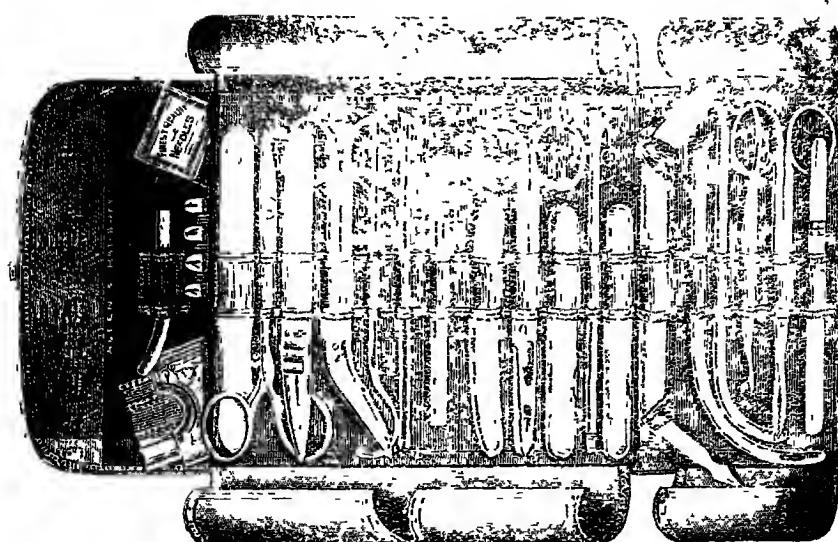
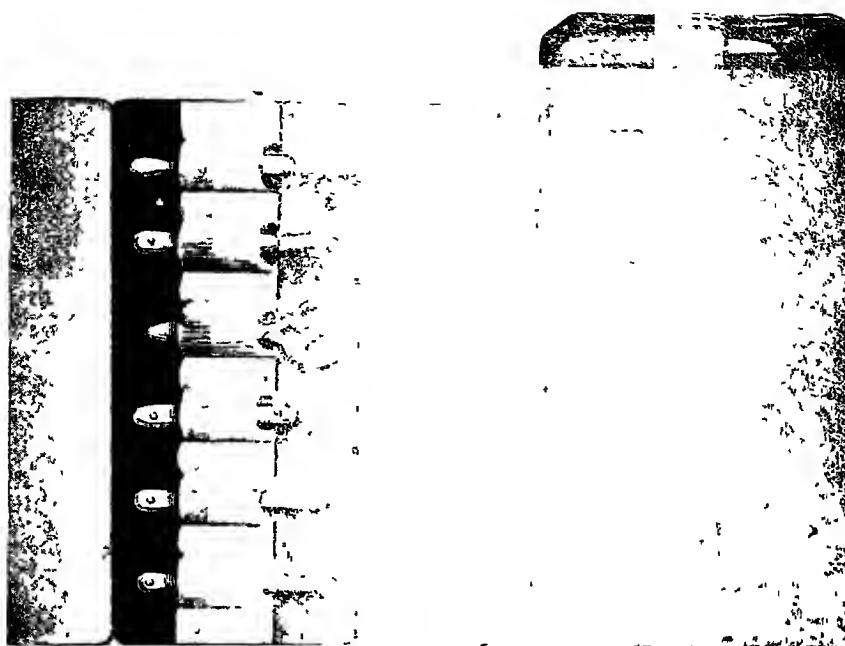
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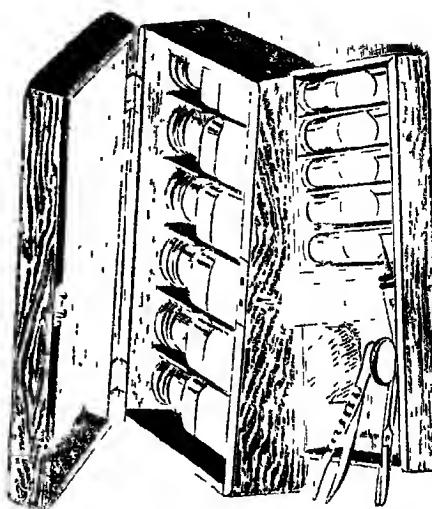
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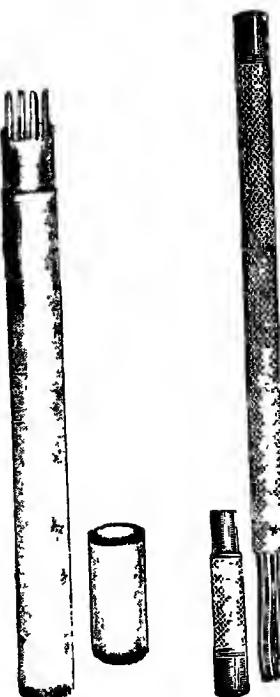
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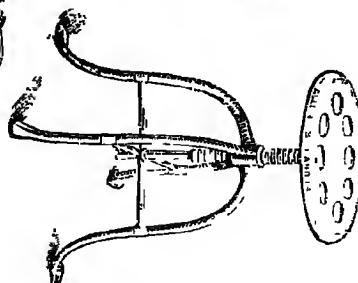
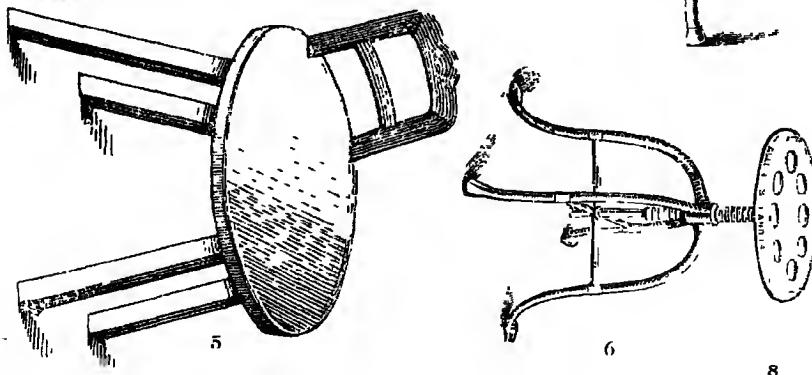
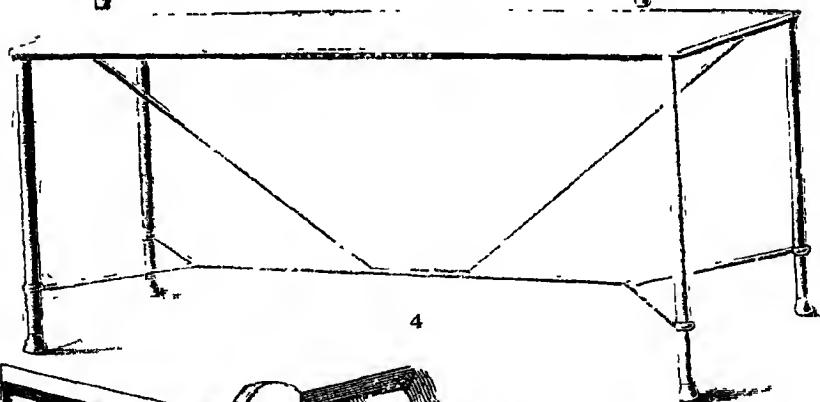
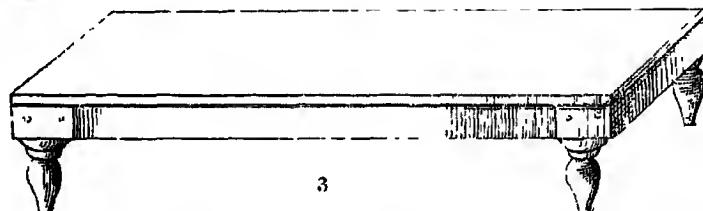
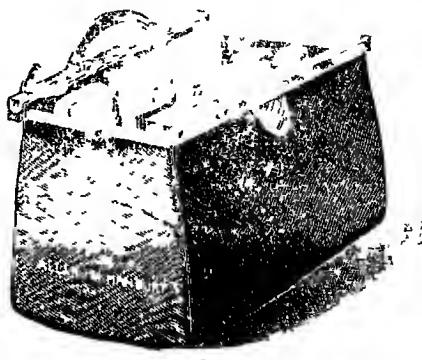
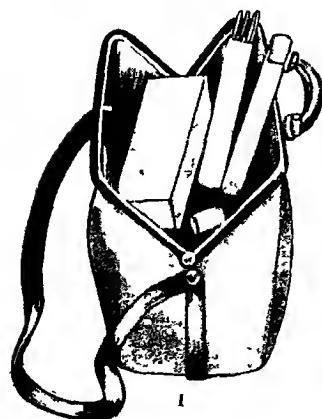
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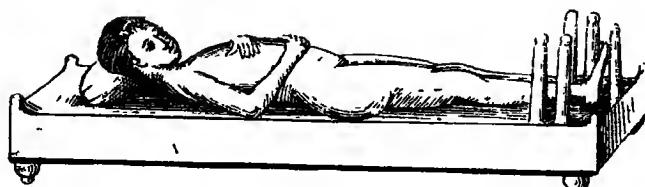
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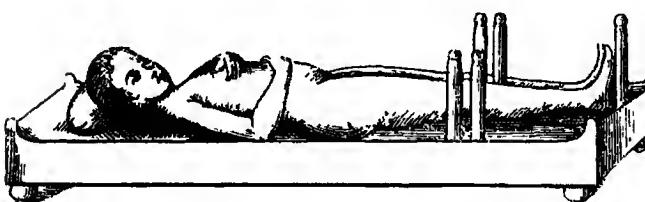
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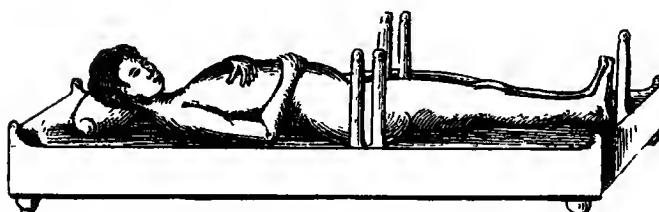
Plate V.



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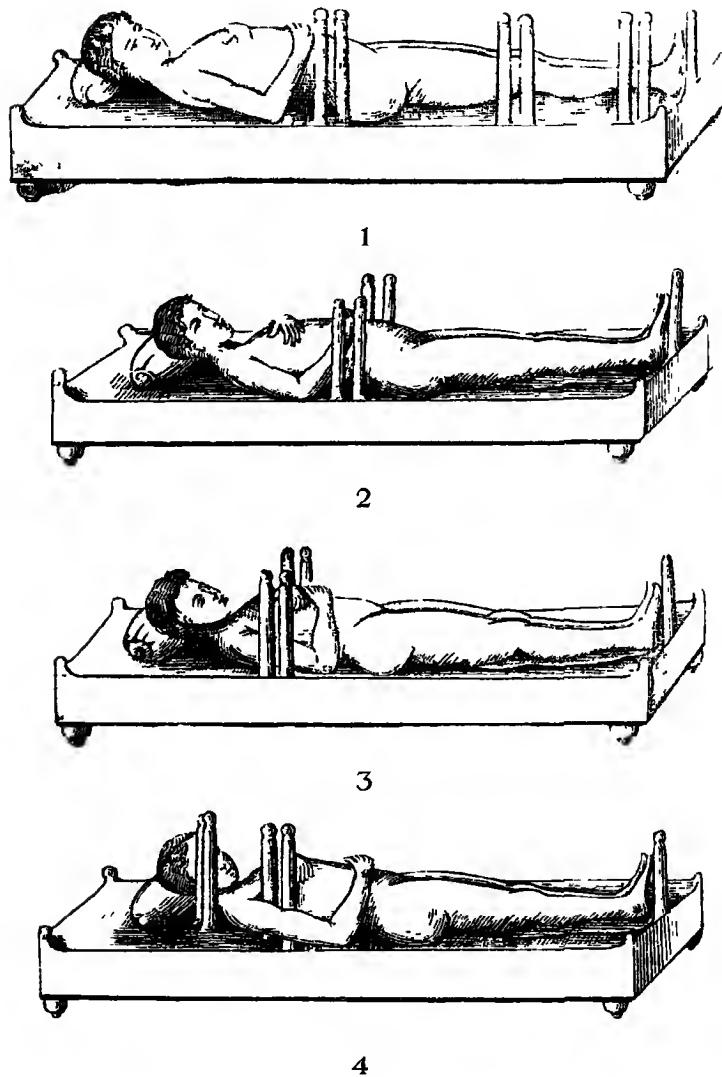
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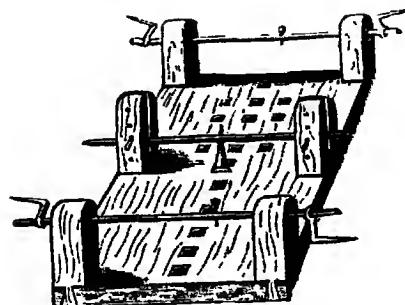
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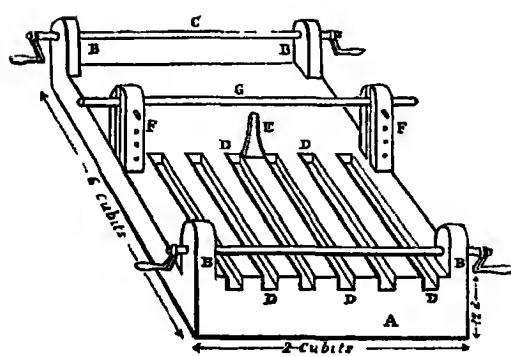
Adams. Vol. II. Pl. IV. Fig. 1 & 2.

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- C. Grove in which the end of the lever A takes its point of support.
- D. The luxated member.
- EE. Extension and counter-extension.

Adams. Vol. II. Pl. V. Fig. 1.

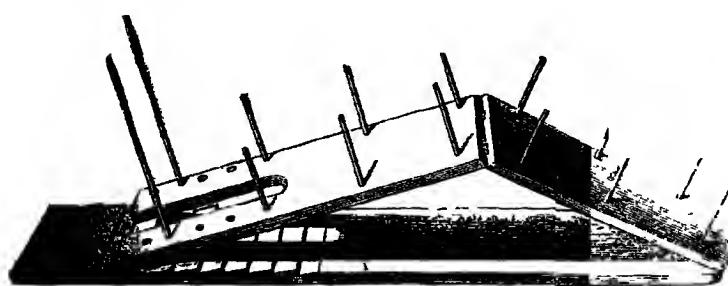
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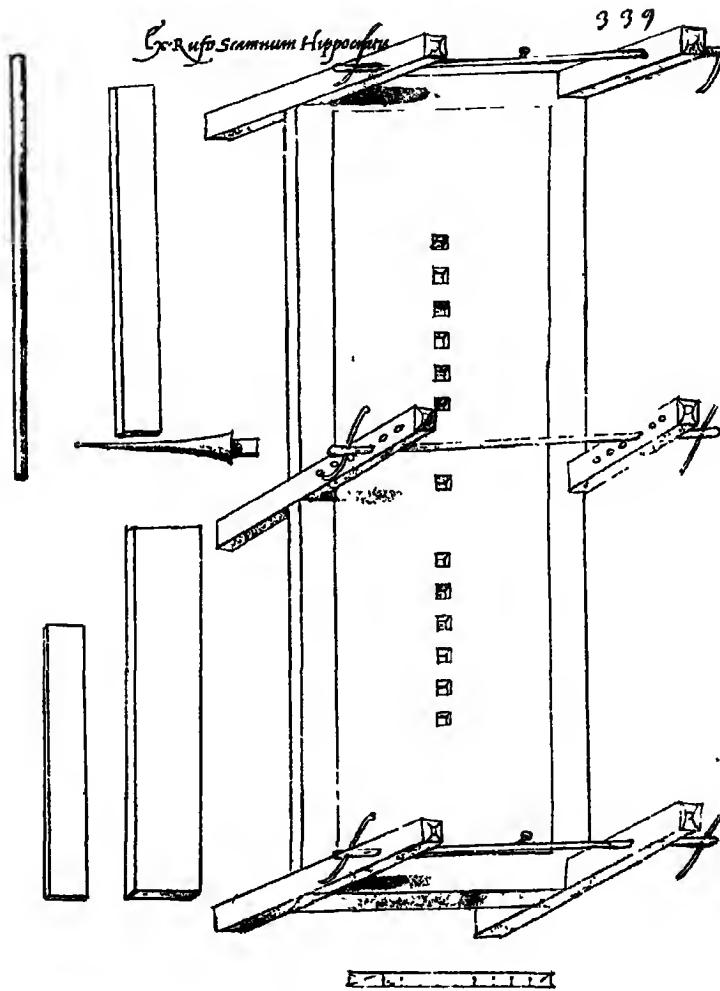
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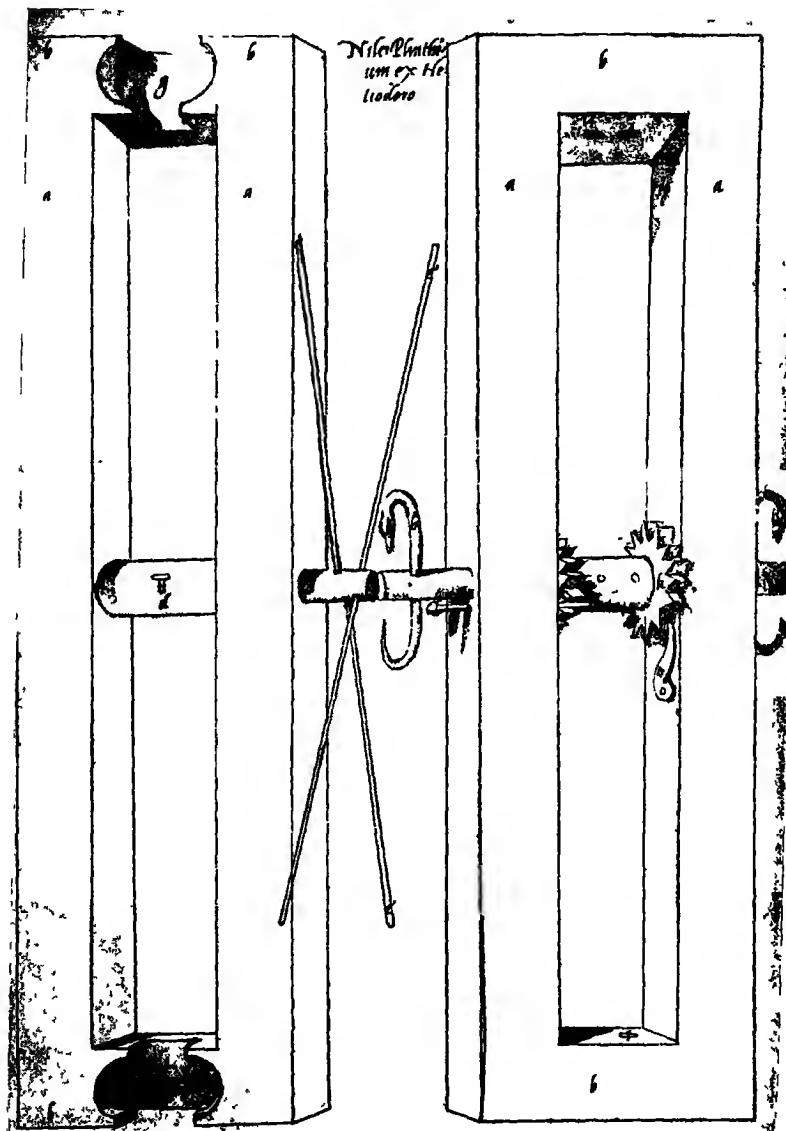
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PLATE XI.

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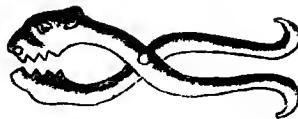
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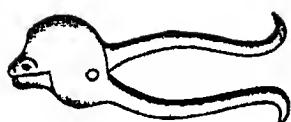
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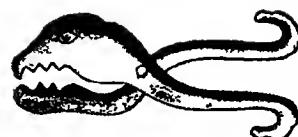
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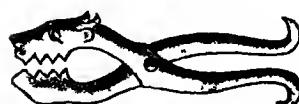
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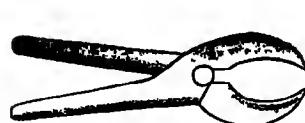
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THE SURGICAL INSTRUMENTS OF THE HINDUS.

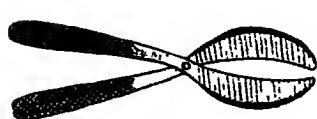
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THE SVASTIKA YANTRA OR CLUCIFORM INSTRUMENTS.

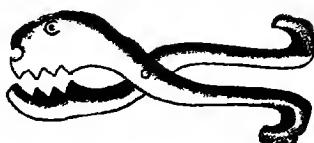
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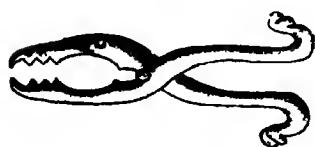
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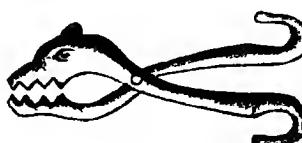
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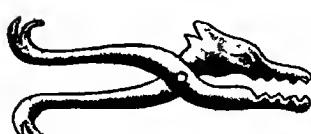
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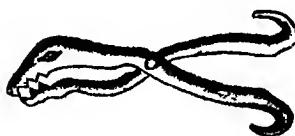
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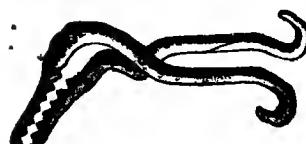
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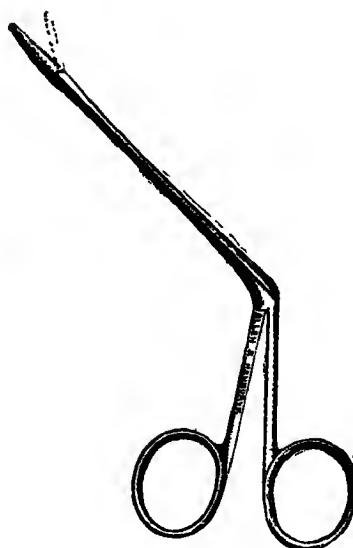
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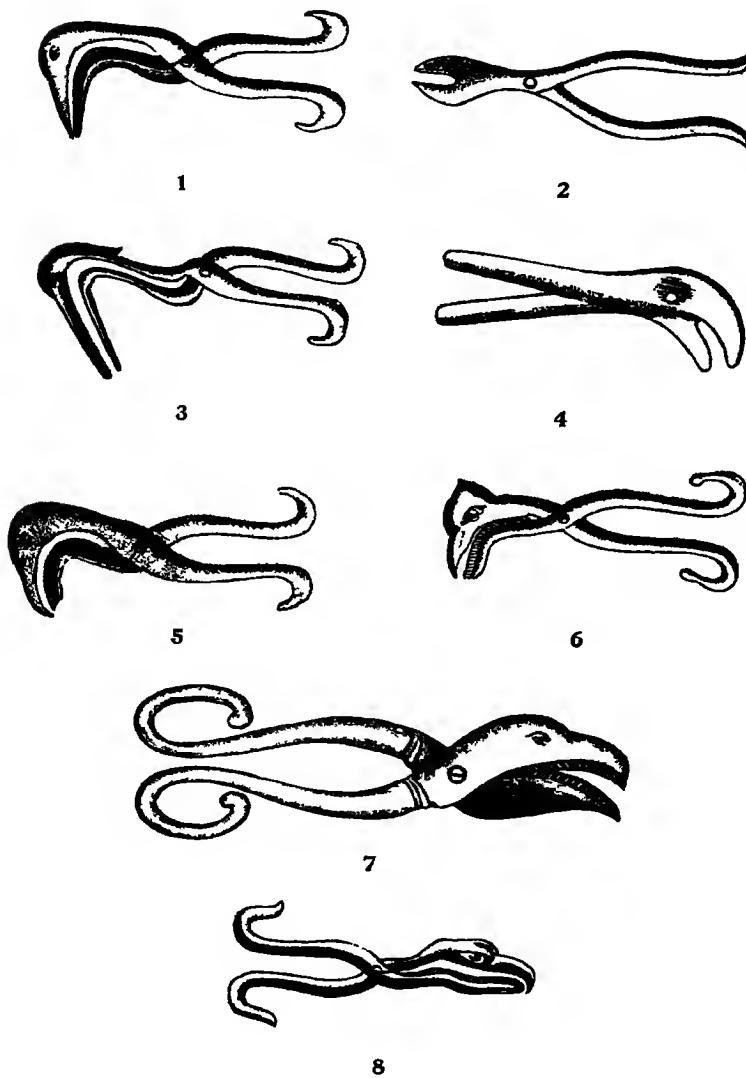
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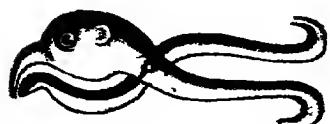
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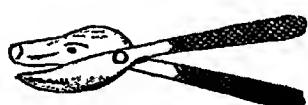
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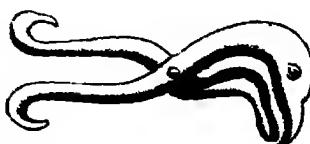
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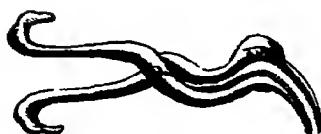
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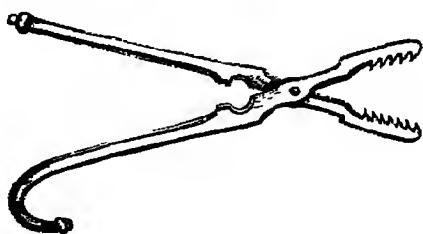
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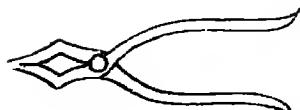
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PLATE XVIII.

THE NĀDĪ YANTRA OR TUBULAR INSTRUMENTS.

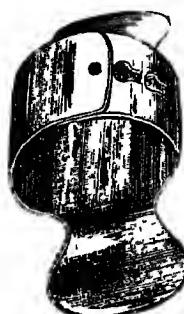
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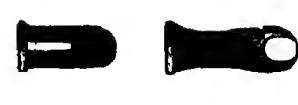
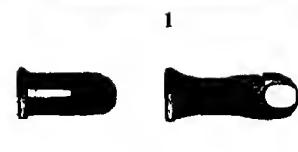
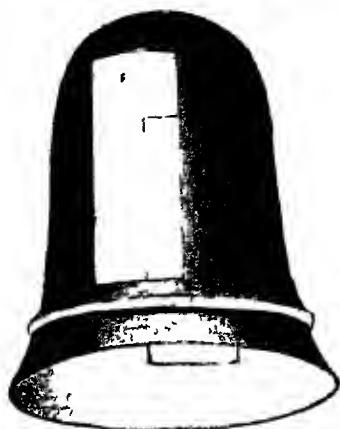
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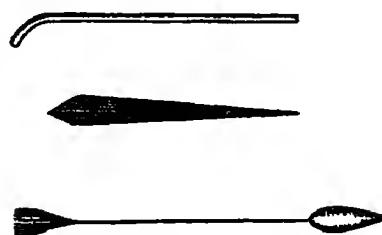
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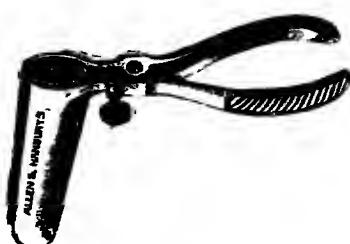
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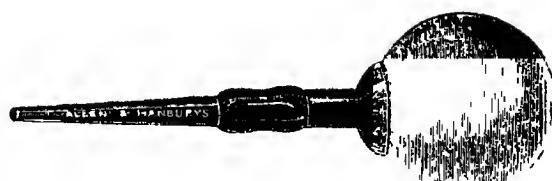
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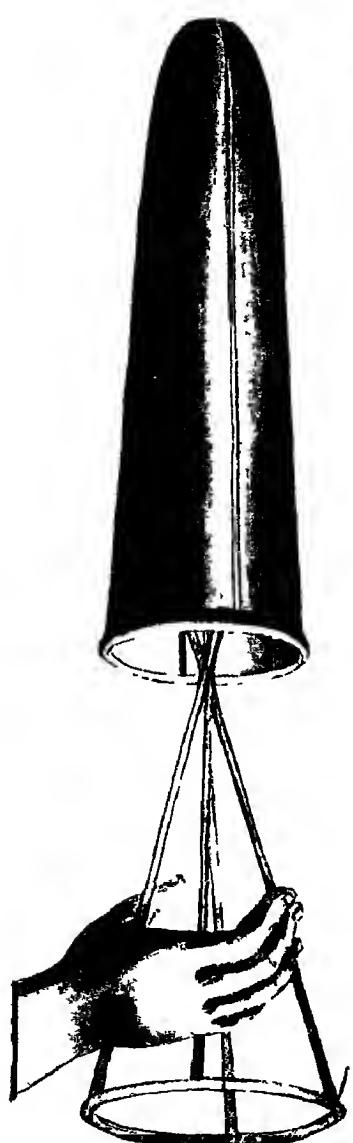
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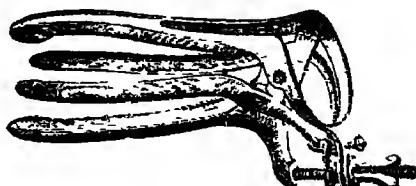
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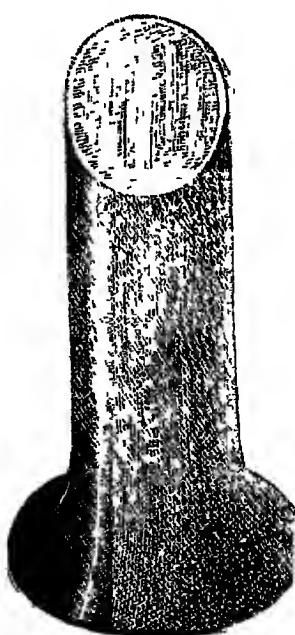
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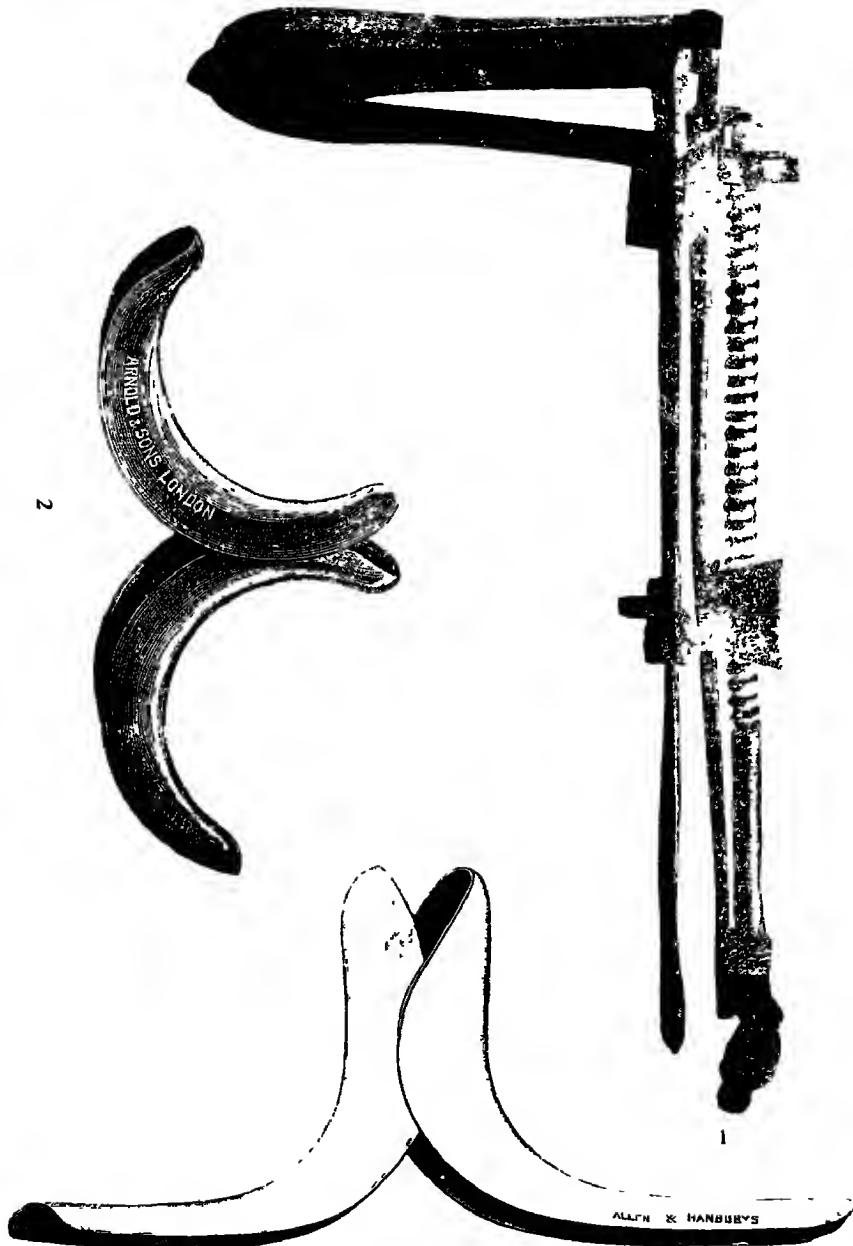
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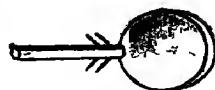
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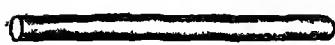
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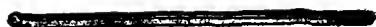
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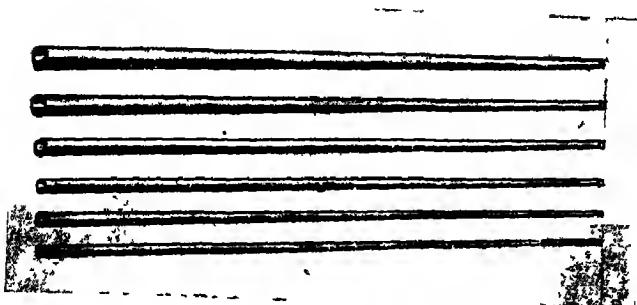
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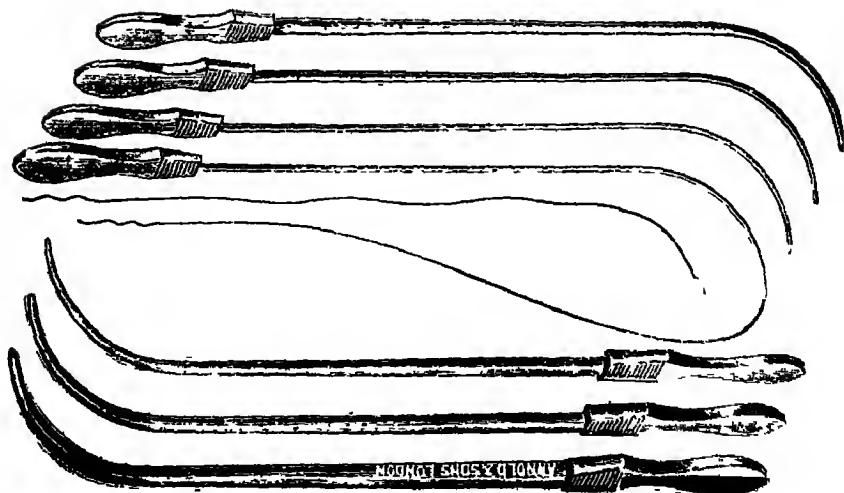
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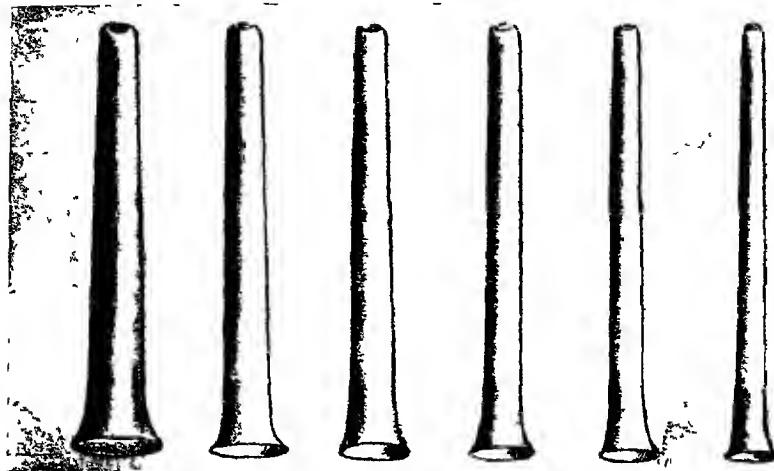
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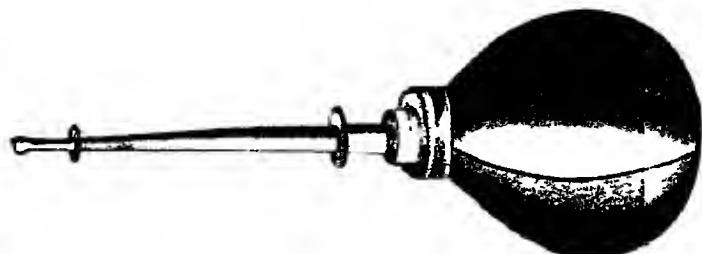
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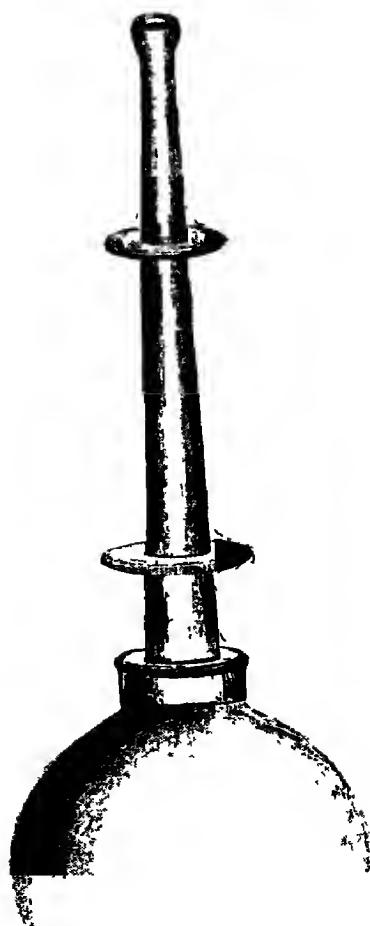
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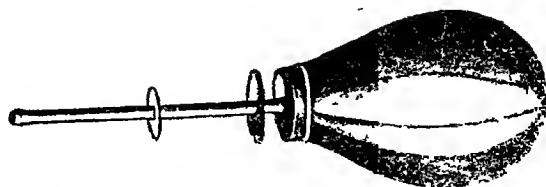
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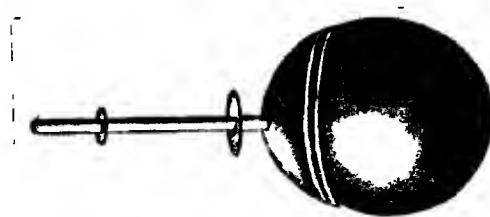
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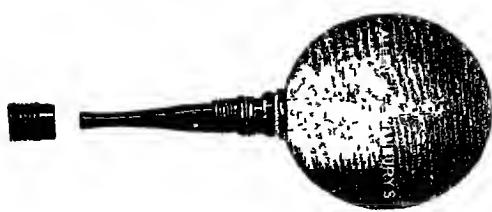
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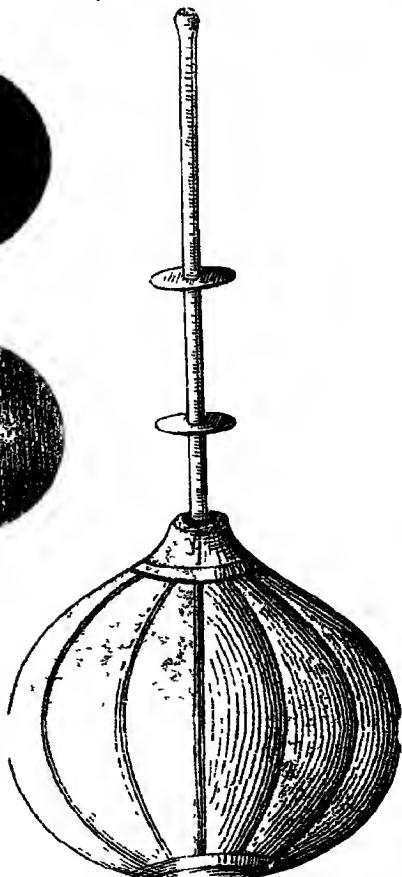
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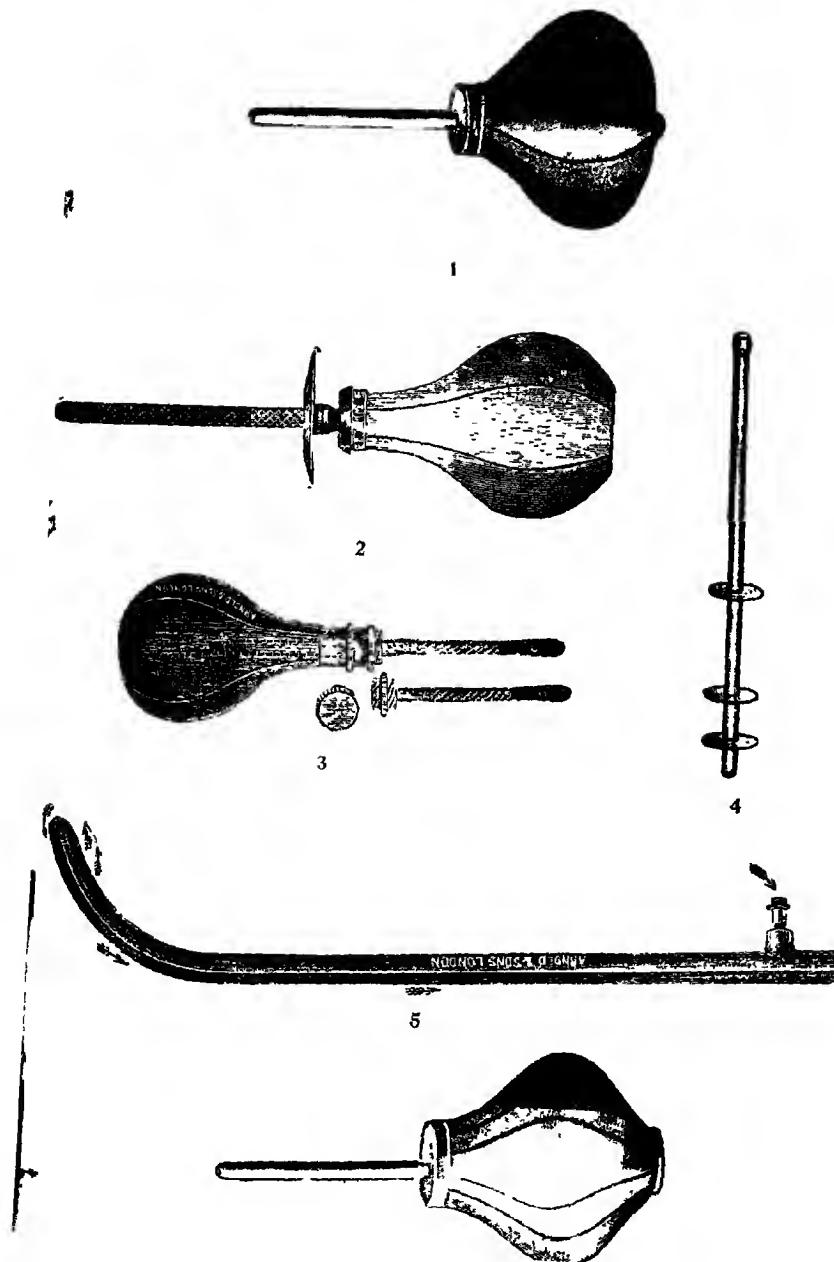
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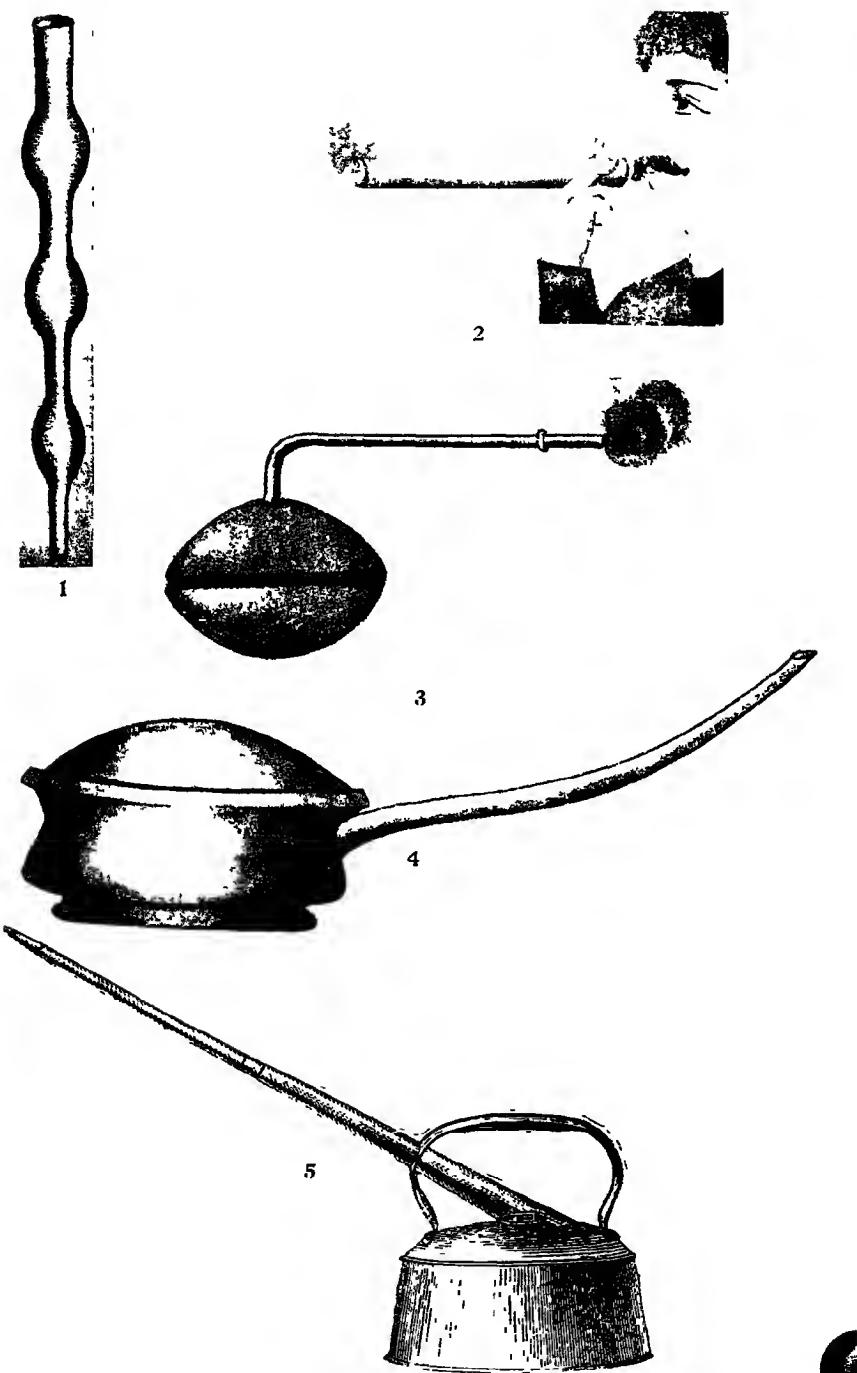


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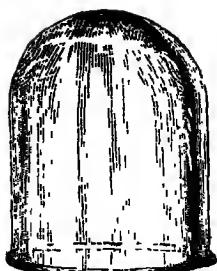


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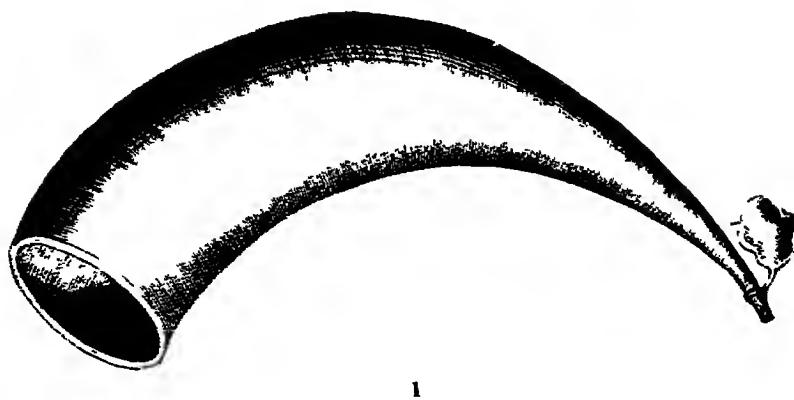
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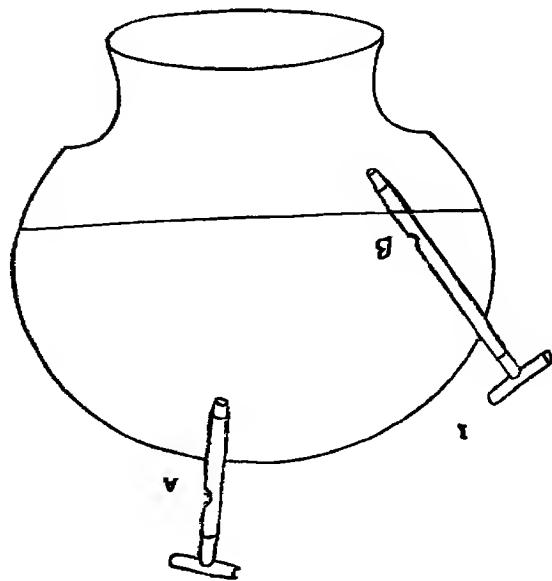
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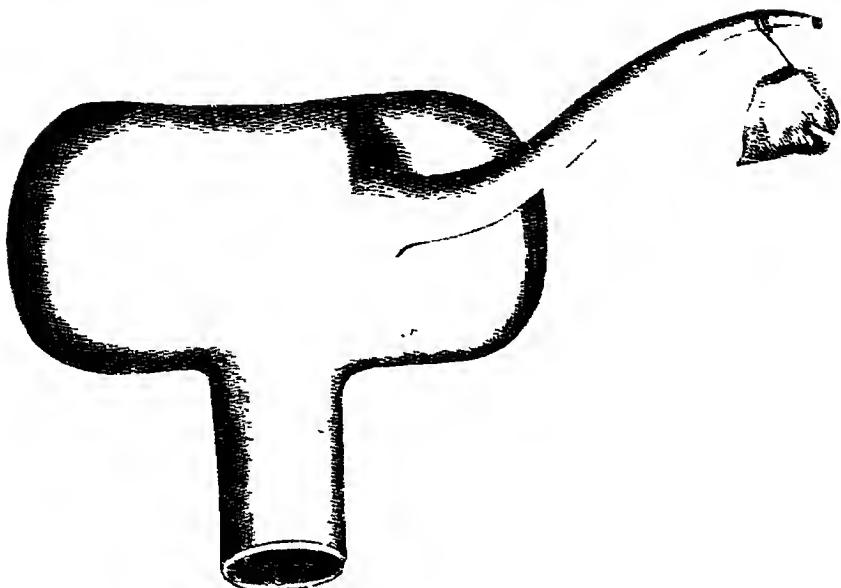
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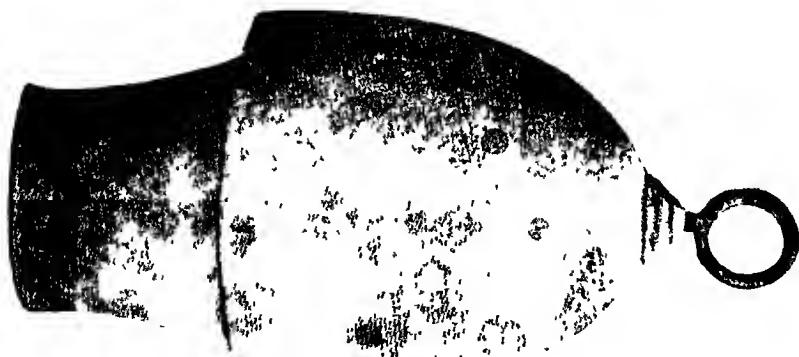
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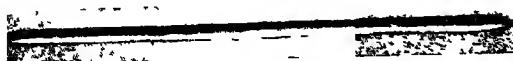
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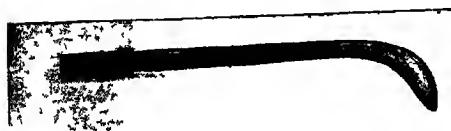
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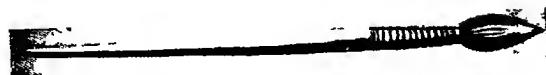
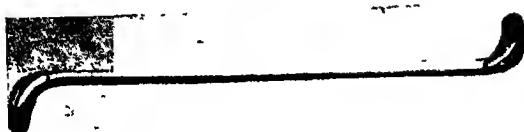
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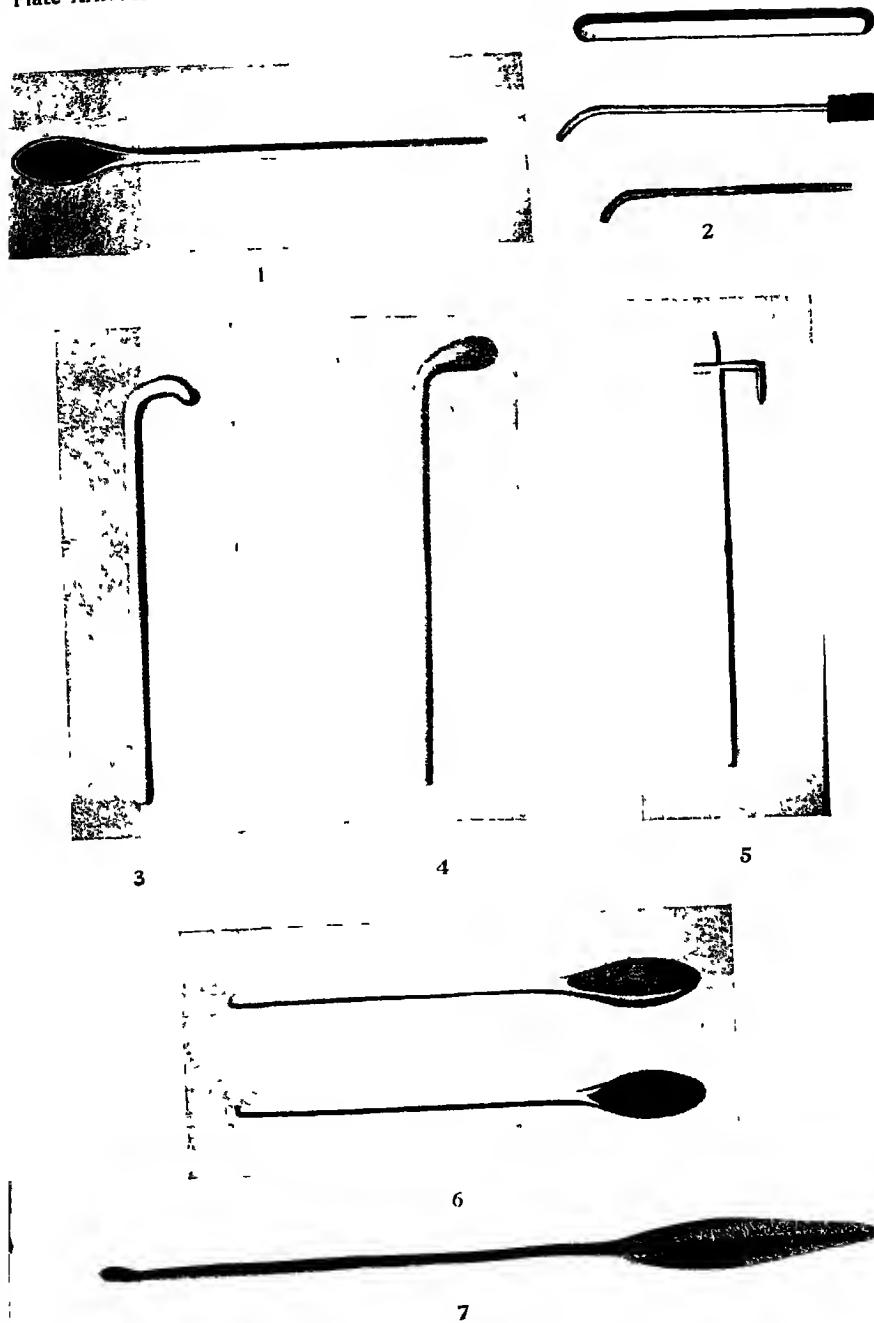
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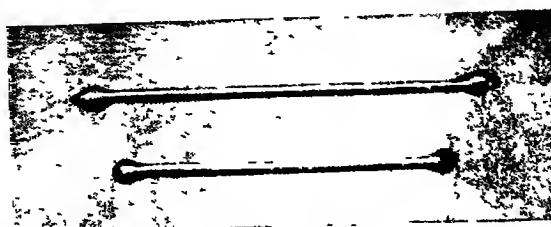
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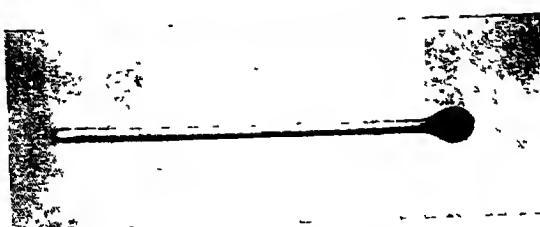
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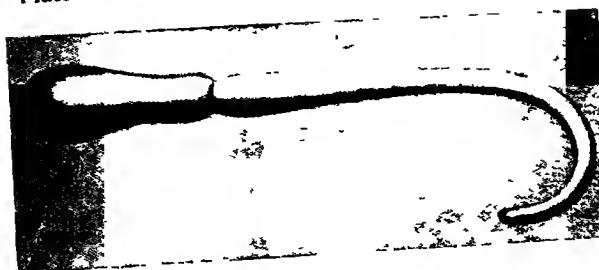
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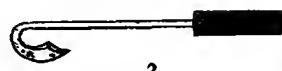
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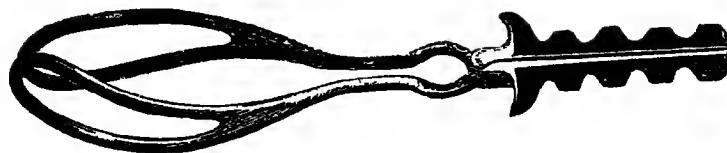
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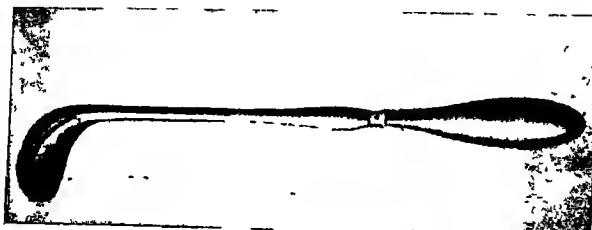
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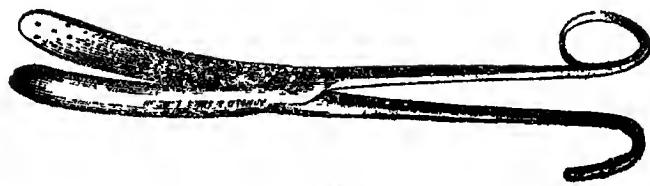
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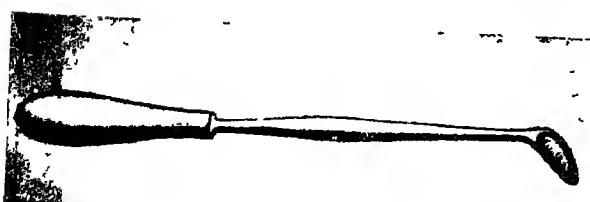
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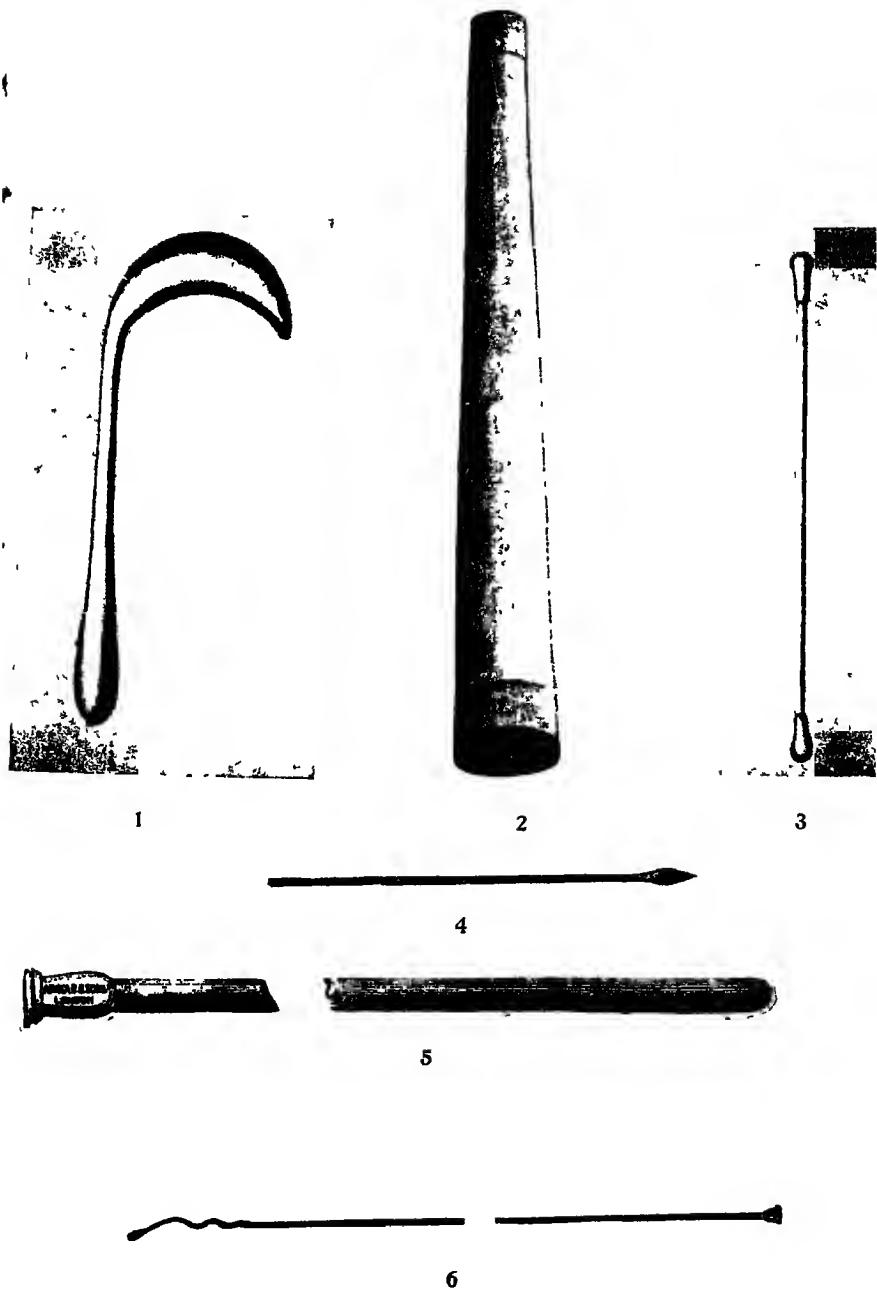
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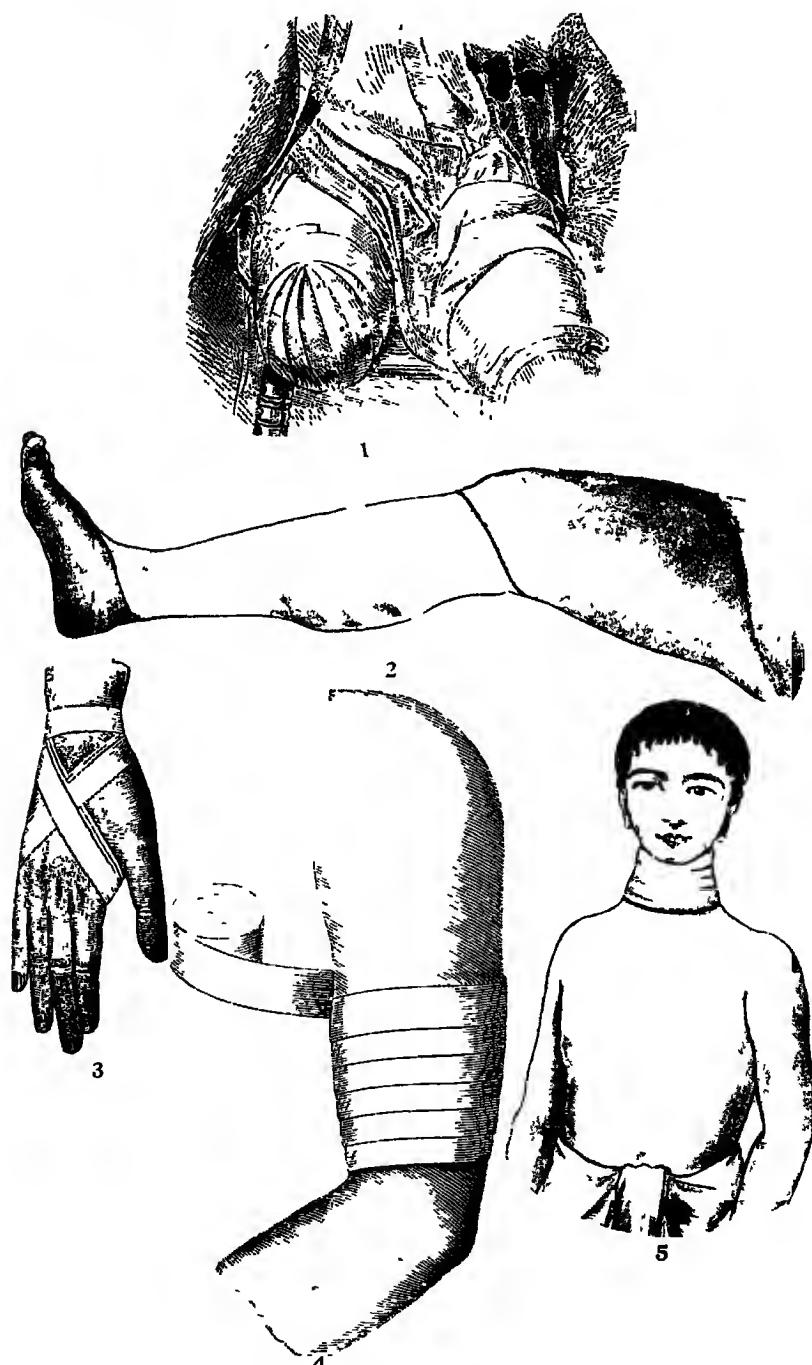
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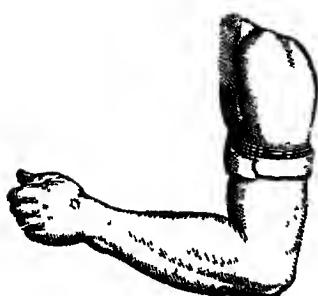
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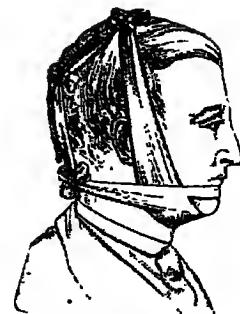
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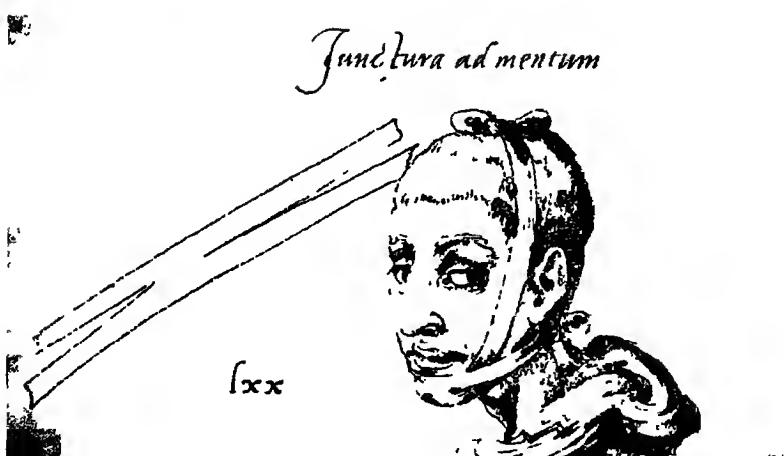
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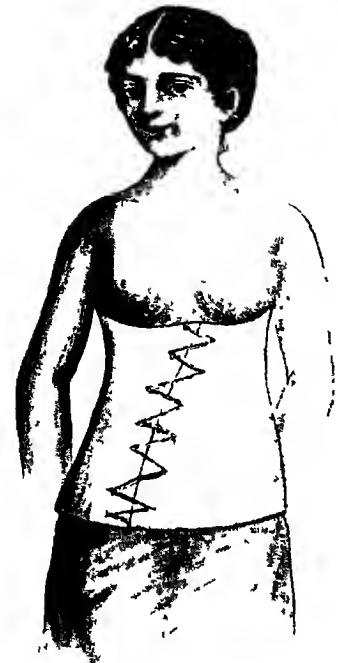
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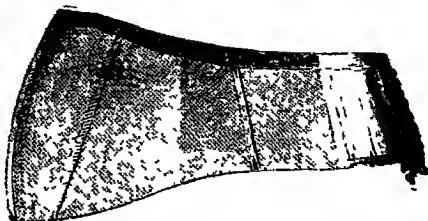
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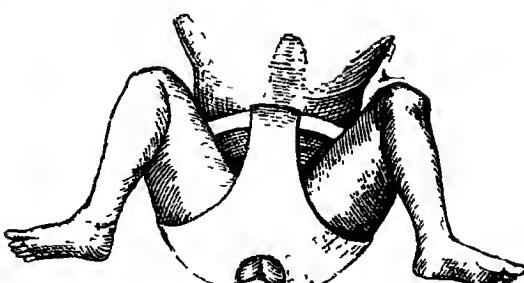
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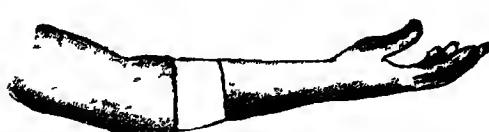
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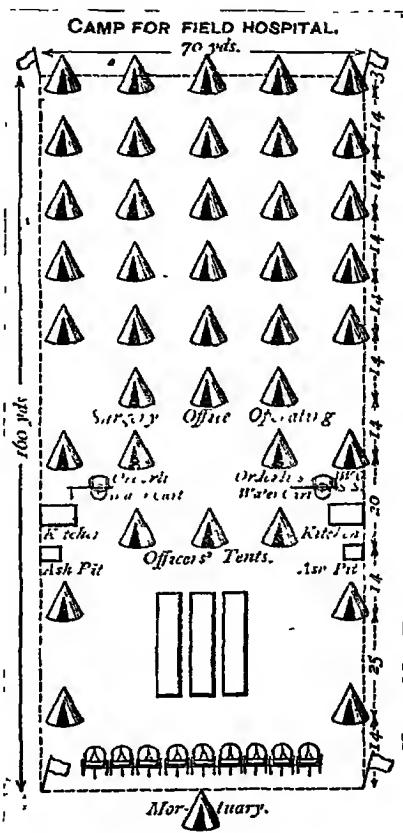
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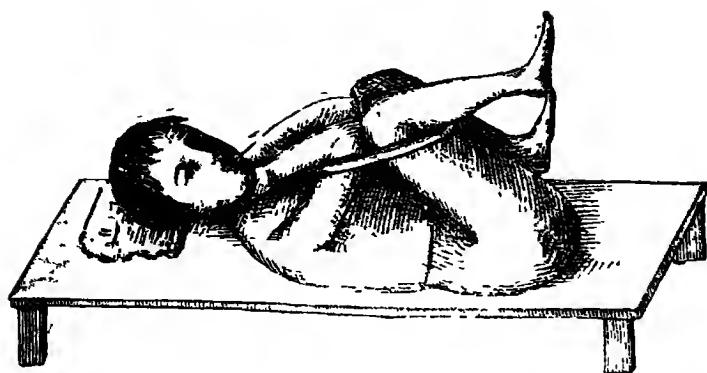
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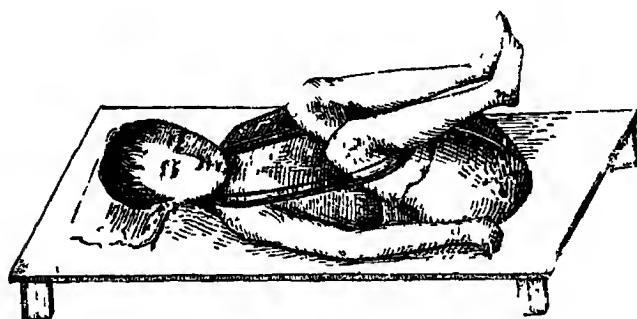
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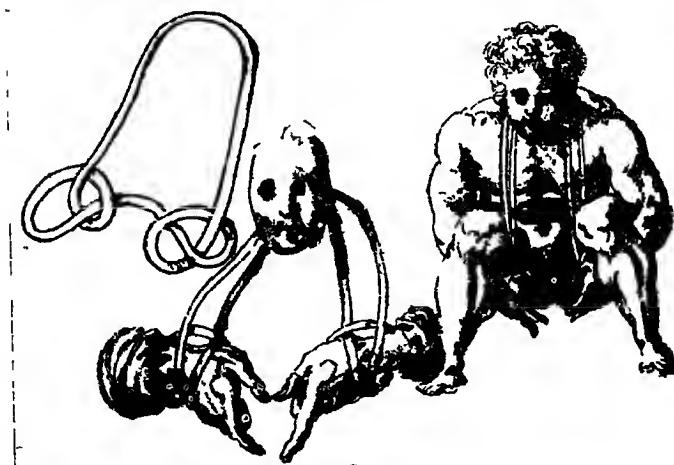
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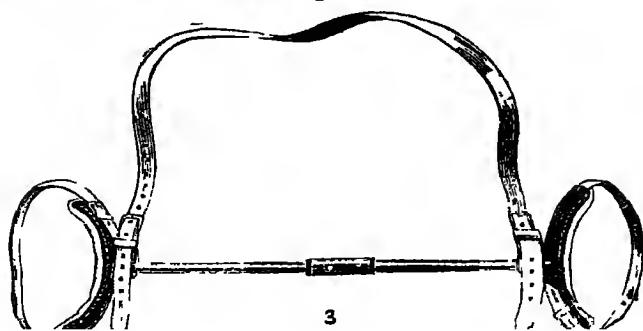
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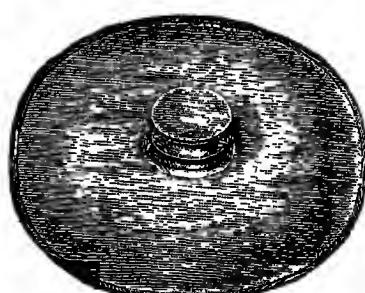
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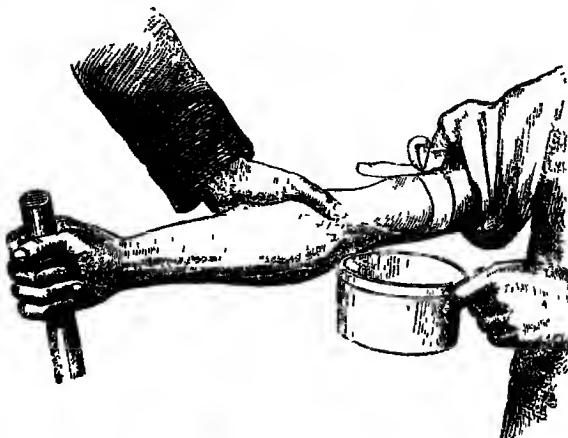
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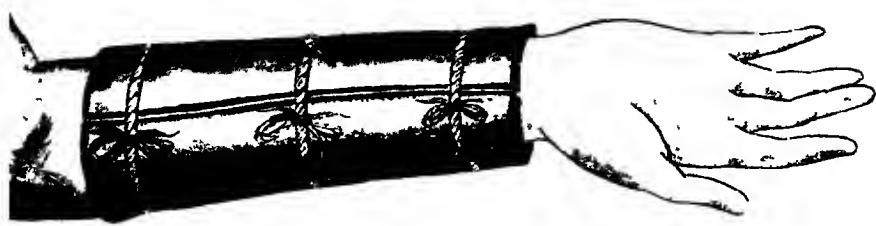
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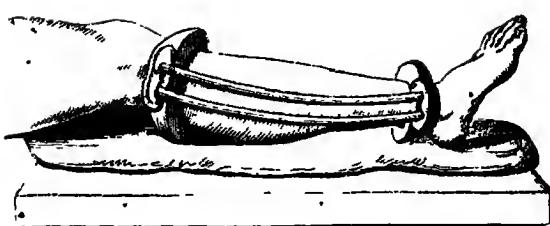
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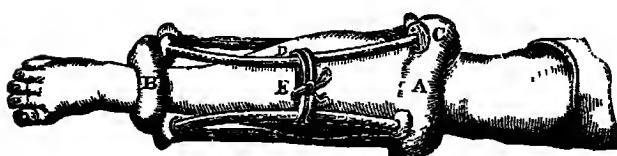
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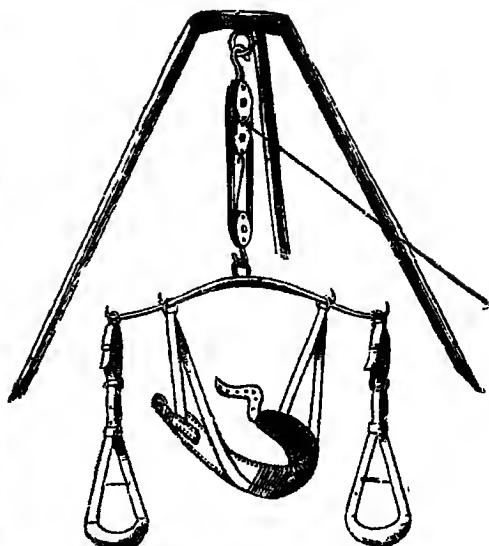
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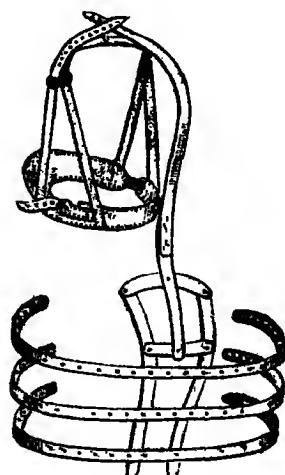
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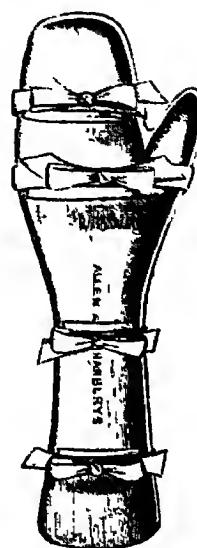
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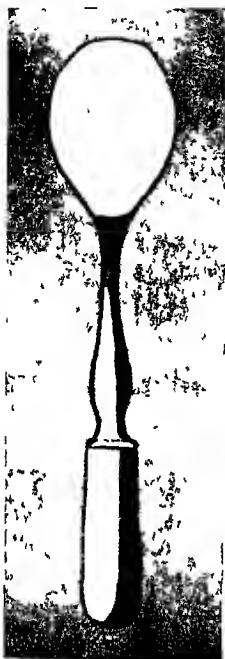
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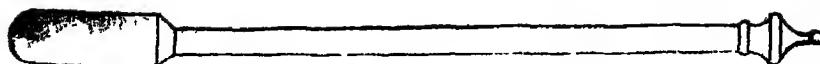
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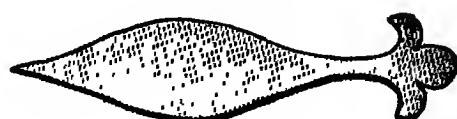
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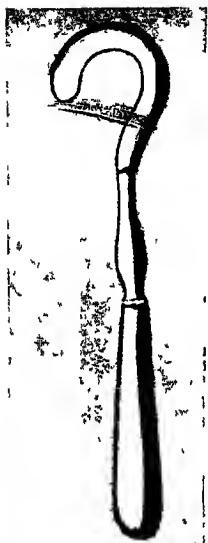
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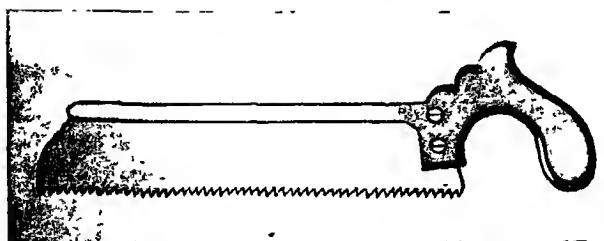
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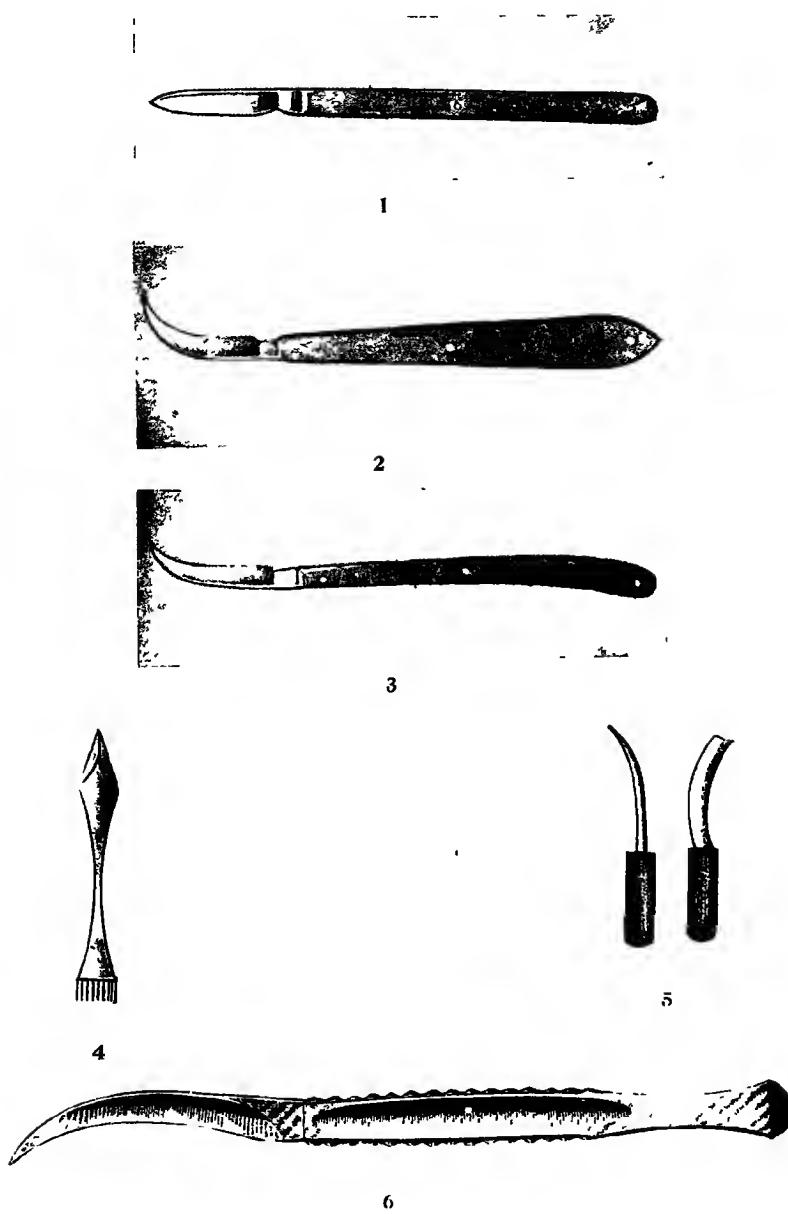
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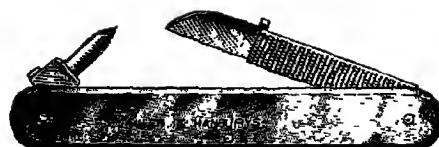
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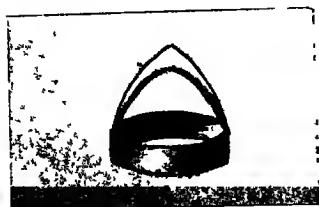
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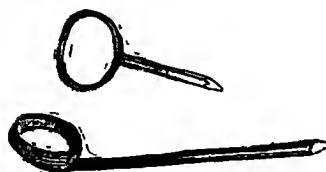
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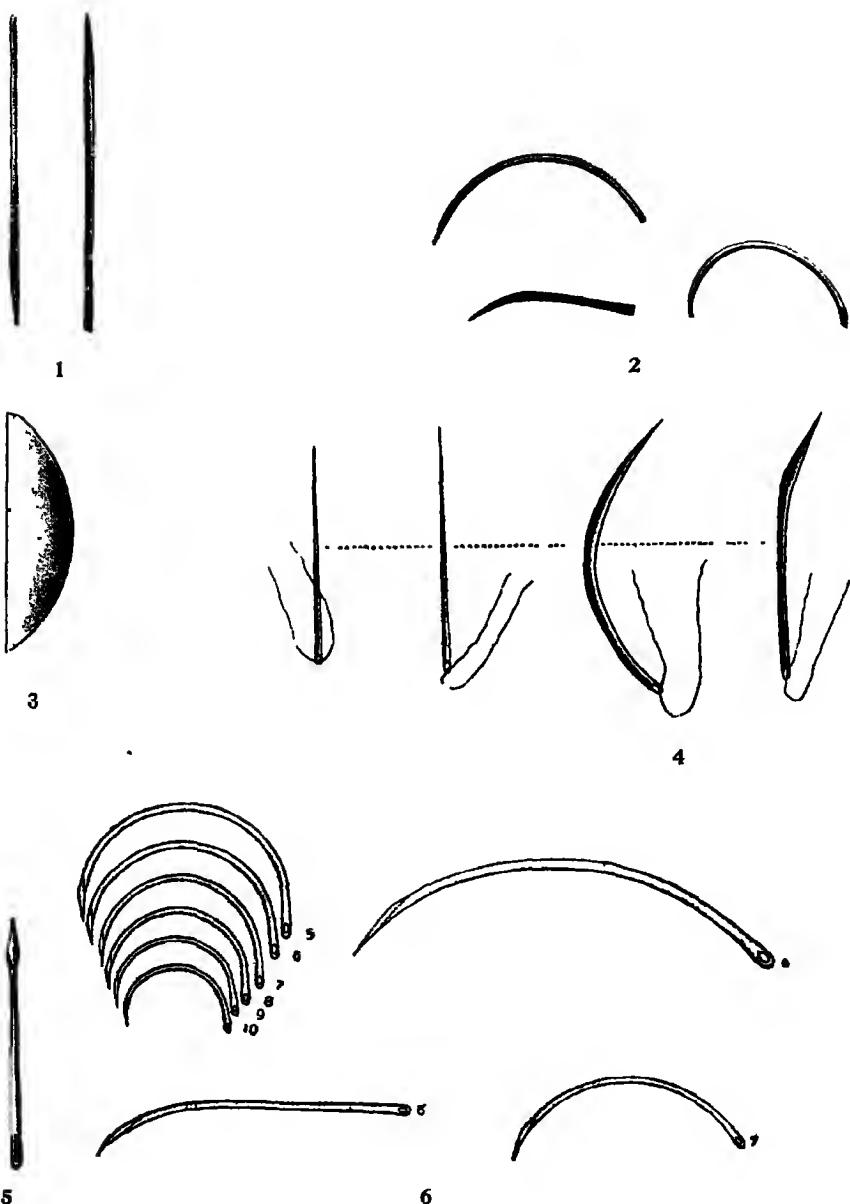
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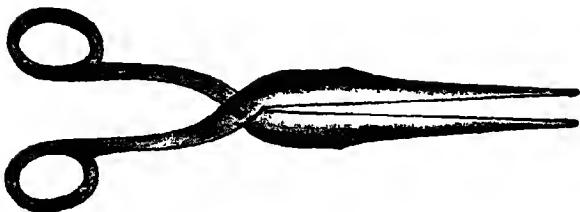
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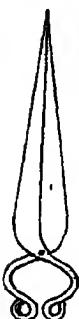
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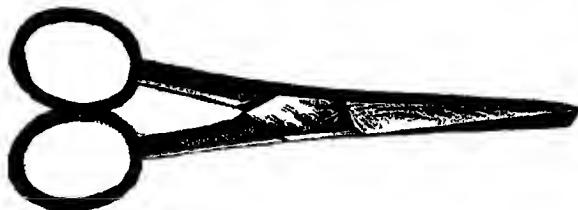
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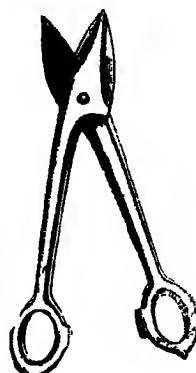
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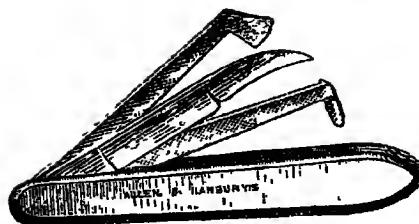
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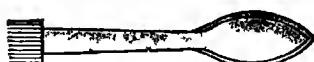
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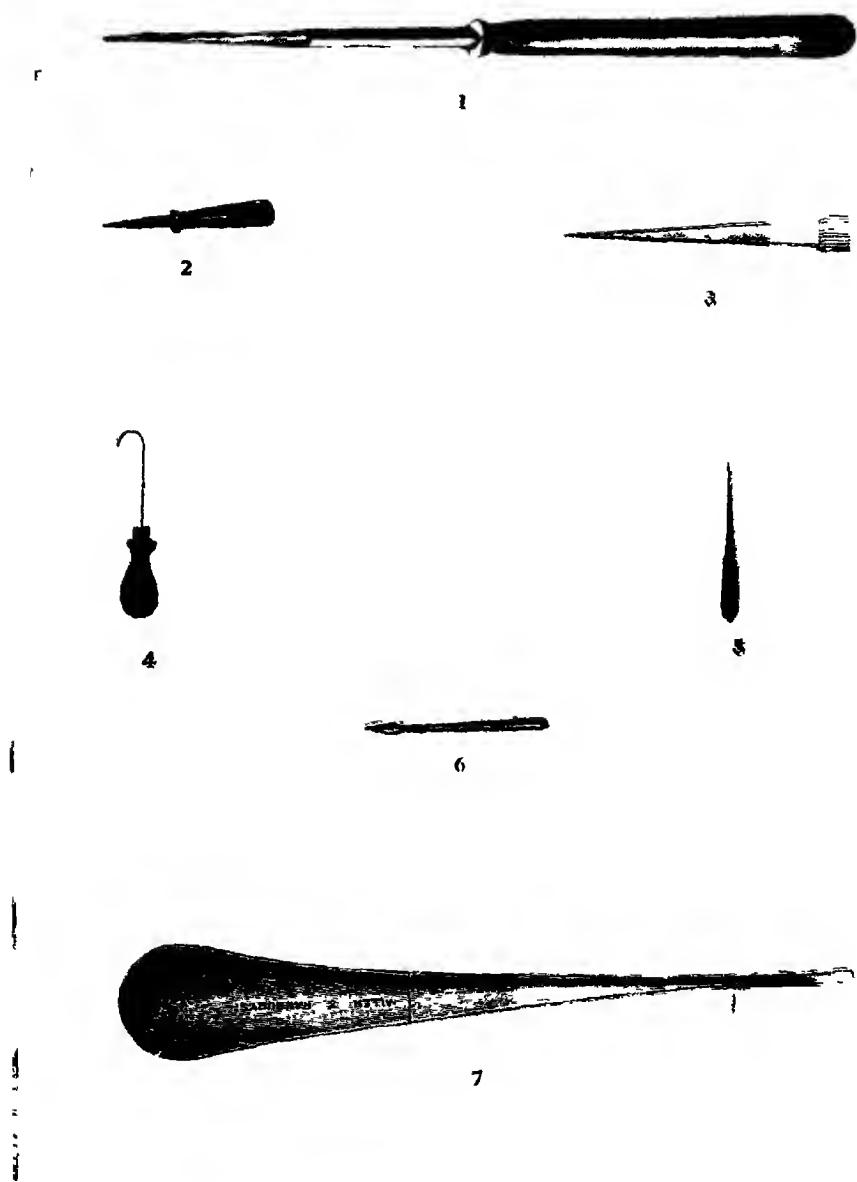
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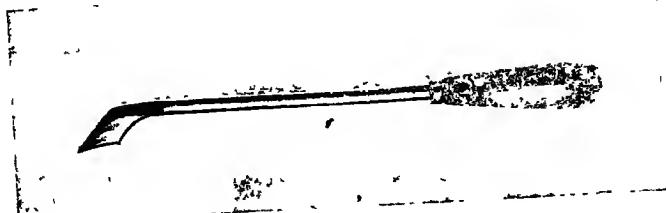
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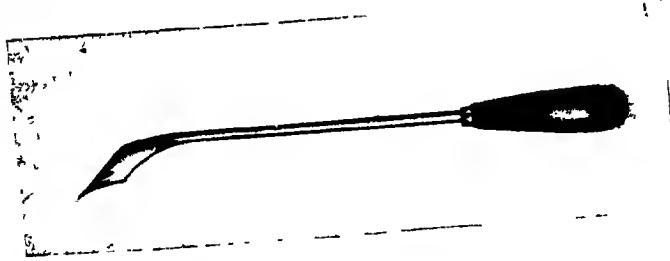
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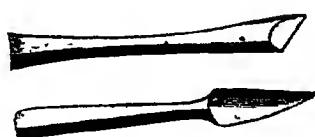
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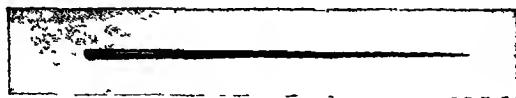
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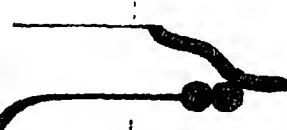
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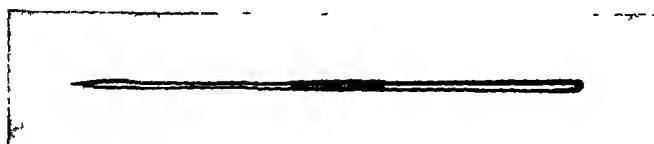


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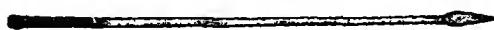


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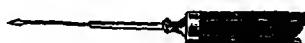
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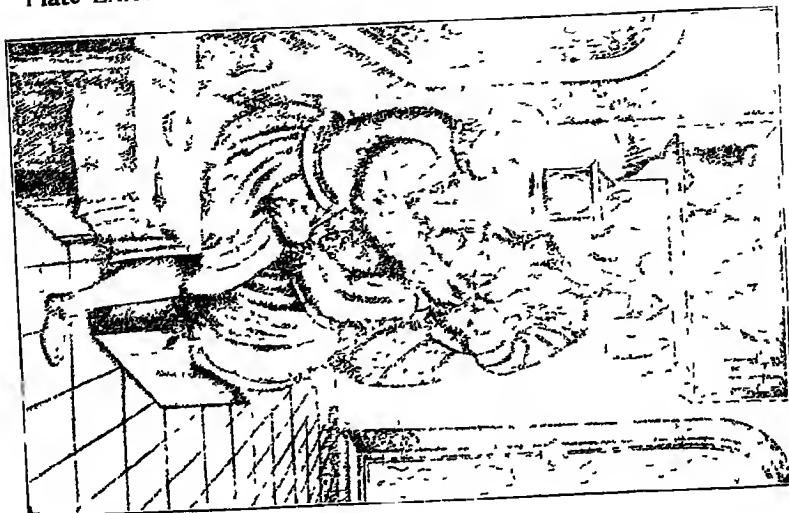
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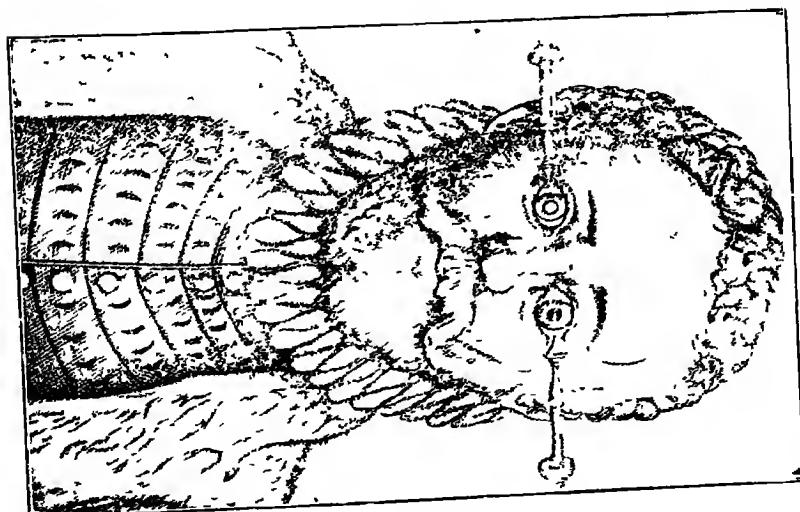
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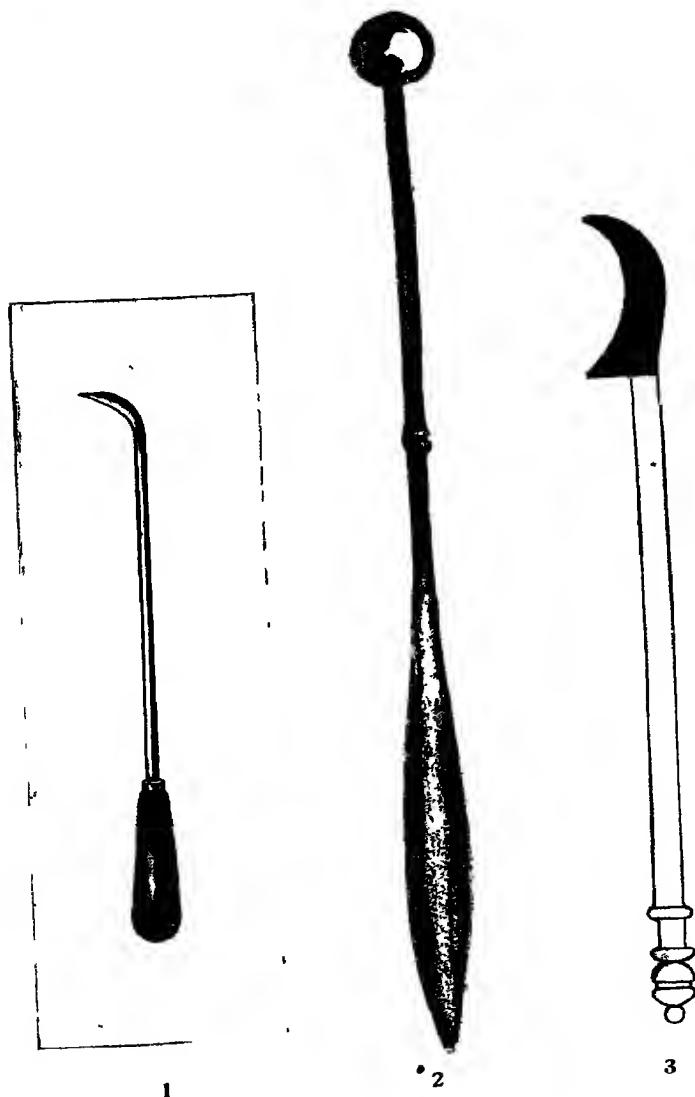
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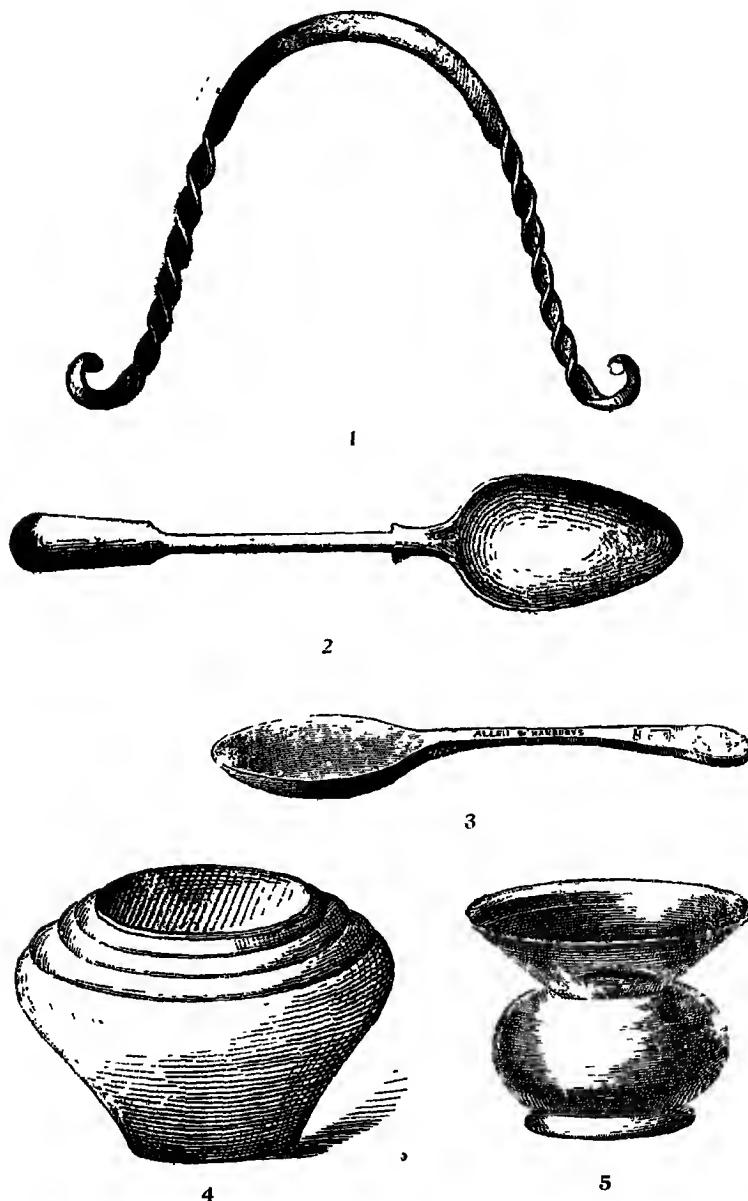
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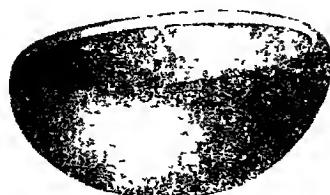
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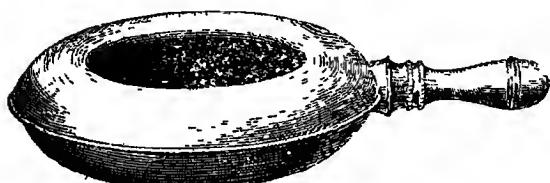
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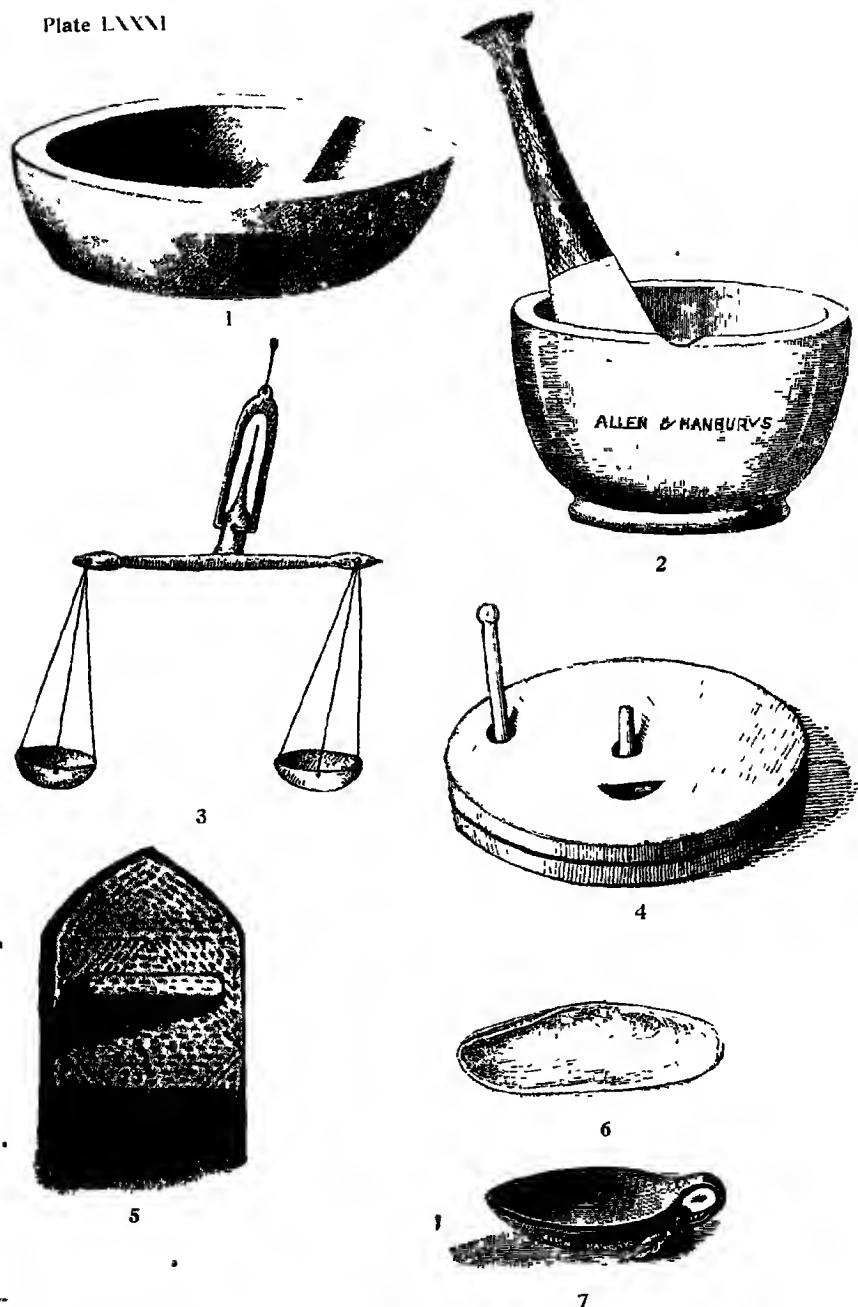
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